

**Rico Surface Water Sampling
Supplemental Surface Water Quality Monitoring
Rico, Colorado
Data Summary Report**

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October 2012

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Rico, Colorado
Surface Water Sampling Report
October 2012 Sampling Event

1.0 Introduction

In accordance with the Rico Sampling and Analysis Plan for Supplemental Surface Water Quality Monitoring at Rico, CO prepared by AECOM, dated November 2010, the surface water sampling event was completed on October 17th – 31st, 2012. Sampling was completed by Anderson Engineering Co. Inc., by technicians who are familiar with the Rico sites and the BP Control of Work Management System. Surface water samples were collected from prescribed locations within the St. Louis settling pond system and at the system discharge (DR-6) to the Dolores River (collectively referred to as the St. Louis pond system), and previously sampled locations along the Dolores River above, at and below the St. Louis pond system. Figure 1 and Figure 1a (see Appendix A) illustrate the location of the various surface water sampling stations along the Dolores River and in the St. Louis pond system. Figure 2 in Appendix A illustrates the locations of the twenty monitoring wells sampled monthly. Sample results have been summarized and laboratory analytical results are attached with quality control documentation.

2.0 Field Sampling

2.1 Sampling Frequency

The sampling period represented by this sampling event is for the month of October of 2012. Sampling will be performed on a monthly basis until at least December of 2012.

2.2 Water Quality and Flow Measurement Sampling Locations

Surface water samples were collected from the locations described on Table 1 and shown on Figure 1 and Figure 1a in Appendix A. In the fall of 2011, twelve (12) new monitoring wells were drilled in the vicinity of the recently constructed interim drying facility. Beginning November 2011, those wells were sampled and will continue to be sampled monthly along with the other sampling locations mentioned. Additionally, eight (8) historic groundwater wells are sampled every month. Figure 2 in Appendix A illustrates the locations of all groundwater wells sampled monthly, and they are described in Table 1.

The Dolores River was sampled above the St. Louis pond system, and below the adit outfalls downstream of the reclaimed Silver Swan Mine area. The river was also sampled at the USGS gaging station downstream of the Silver Swan site.

TABLE 1 - Sample Location Summary

SITE ID	SITE DESCRIPTION
DR-4-SW	Dolores River below Silver Swan
DR-1	Dolores River above St. Louis settling pond system
DR-2	Dolores River immediately above the St. Louis settling pond system outfall
DR-3	St. Louis tunnel discharge at adit

DR-4	Discharge of Pond 15
DR-5	Discharge of Pond 8
DR-6	St. Louis settling pond system outfall to the Dolores River
DR-7	Dolores River below St. Louis settling pond system outfall
DR-G	Dolores River at USGS gaging station #09165000
GW-1	Located on the north end of the site, approximately a quarter mile north of the northern edge of Pond 18.
GW-3	Located approximately 200 feet north of the northern edge of pond 18, and approximately 60 feet west of the main access road.
GW-4	Located on the western flood dike of Pond 18, approximately midway along the dike.
GW-5	Located on the northern edge of the former Pond 17 area, or on the northern dike of the newly constructed drying cell 1.
GW-6	Located on the middle of the former Pond 17 area, or on the western edge of the south dike of the newly constructed drying cell 1.
GW-7	Located on the eastern edge of the access road directly across from the former Pond 17, or directly across from the newly constructed drying cell 2.
EB-1	Located on the northern edge of the former Pond 17 area, or on the northern dike of the newly constructed drying cell 1. It is within ten feet of GW-5.
EB-2	Located on the southern portion of the former Pond 16 area, or on the western edge of the south dike of the newly constructed drying cell 3.
MW-1 Shallow MW-1 Deep	Both wells are located about 4 feet apart on the western embankment of Pond 13 at the division between Pond 11 and Pond 12.
MW-2 Shallow MW-2 Deep	Both wells are located about 4 feet apart on the western flood embankment of Pond 12, about mid-way along the pond.
MW-3 Shallow MW-3 Deep	Both wells are located about 4 feet apart on the western flood embankment of Pond 15, on the southern half of the embankment.
MW-4 Shallow MW-4 Deep	Both wells are located about 4 feet apart on the southern embankment of Pond 13, approximately 60 feet west of the main east access road.
MW-5 Shallow MW-5 Deep	Both wells are located about 4 feet apart on the western dike of drying cell 3 (refer to Figure 2).
MW-6 Shallow MW-6 Deep	Both wells are located about 4 feet apart on northern embankment of Pond 13, approximately 75 feet west of the main east access road

2.3 Sampling Station Descriptions

The sampling requirements and stations are described in detail below, as well as the conditions at each station for this sampling period:

DR-1. Dolores River above St. Louis settling ponds system. The sampling/flow measurement location is on the Dolores River approximately 50 feet upstream of the Rico Ranger Station. Flow measurement was collected by flowmeter.

DR-2. Dolores River immediately above the St. Louis settling pond system outfall. Sampling/flow measurement location is on the Dolores just above the 002 discharge outfall, and upstream of the hot tub discharge. The site is located

directly adjacent to the thermal discharge which supplies the hot tub. Flow measurement was collected by flowmeter.

DR-3. St. Louis tunnel discharge at adit entrance. Sampling location is at the inlet of the flume, just before the throat. Flow measurement by an installed 9" flume and water level measurement devices at the sampling location.

DR-4. Discharge of Pond 15. Flow measurement was collected by flowmeter.

DR-5. Discharge of Pond 8. Due to the shallow water and multiple paths, accurate flow measurements could not be determined for this sampling location and period. Leakage was estimated by water balance. Flows estimated by water balance and water level reading.

DR-6. St. Louis settling ponds system outfall to the Dolores River (Outfall 002). Flow measurement by installed 9" flume.

DR-7. Dolores River below St. Louis settling ponds system outfall. Sampling/flow measurement location is located just off the entrance road to the St. Louis ponds site where the Dolores River is adjacent to the entrance road. The site is located approximately 75 feet downstream from a large bend in the river that first brings the Dolores adjacent to the entrance road. Flow measurements were collected by flowmeter.

DR-4-SW. Dolores River below Silver Swan. Sampling/flow measurement location is on the Dolores River below the Silver Swan site just downstream of a bend in the river and below a cemetery on the east bank. Flow measurements were collected by flowmeter.

DR-G. Located at the USGS gauging station #09165000. Flow measurements were collected by flowmeter.

Monitoring Wells. All monitoring wells were sampled by use of a bailer, and field measurements were taken at the time of sampling. Depth measurements were also taken at this time. For the October 2012 sampling period, MW-2 Shallow and MW-3 Shallow were dry.

2.4 Simultaneous Operations

During the month of October 2012, several other projects were occurring simultaneously at the St. Louis Ponds site.

- Dredging of accumulated solids material from Pond 15 continued through the duration of the sampling. A floating suction dredge pumped water from Pond 15 into Pond 13 in order to settle out solids. After solids had settled out, the decant water was then pumped back into Pond 14. Adequate pond system retention time had been maintained and dredging should not have had any noticeable effects on the quality of the water samples collected. However, flow from Pond 15 to 14 was partially dammed in order to perform the dredging. As a result, there was insufficient flow exiting the Pond to obtain flow readings.
- Construction of the pilot scale wetland test was occurring during the sampling period. This construction should have had little to no effect on the water quality in the Ponds.
- The 517 Injection test was underway during the sampling period. Alkaline solution of potassium carbonate was being injected into the 517 shaft.

Due to this project, the water quality at the St. Louis adit discharge (DR-3) and other pond system sample may have been affected.

3.0 Sampling and Analysis Parameters and Methods

All samples were collected as grab samples or composite samples. Samples were collected from well-mixed locations, which are representative of conditions within the flow stream or compartment. Lab-certified plastic bottles were used to collect sample water for analyses. Clean hands, dirty hands procedures were followed throughout the sampling. For quality control purposes, one duplicate sample and one field blank were included with the water samples being submitted to the laboratory for analysis.

Lab-certified plastic bottles were used to collect all water samples. Sample water was first collected in clean plastic jugs, and within 10 minutes, placed in the sampling bottles. The following sample bottles were used for collection and analysis (all samples collected without filtration unless otherwise indicated):

- One (1) 500mL HDPE bottle, unpreserved, for alkalinity, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), chloride and sulfate analysis
- One (1) 250mL HDPE bottle, unpreserved, for salinity analysis
- One (1) 250mL HDPE bottle, preserved with HNO₃, for total metals, silica, and water hardness analysis
- One (1) 250mL HDPE bottle, preserved with HNO₃, for dissolved metals analysis. This sample is filtered in the field through a 0.45µm filter.
- One (1) 250mL HDPE bottle, preserved with HNO₃, for potentially dissolved metals analysis
- One (1) 250 mL HDPE bottle, preserved with NaOH and Zn Acetate, for sulfide analysis.
- One (1) 250 mL HDPE bottle, preserved with NaOH, for cyanide analysis
- One (1) 250 mL amber glass bottle, preserved with H₂SO₄, for Total Organic Carbon (TOC) and nitrate analysis

Field parameters were measured at the time of sample collection. Field measurement data for pH, temperature, electrical conductivity, dissolved oxygen, and Oxydation-Reduction Potential were recorded using a Hanna Instruments HI 9828 Multiparameter Meter, and results were logged in the field log book. Results of field measurements for all samples collected on site can be found in Appendix B. Weather parameters including temperature and precipitation were obtained and documented in the Daily Toolbox Meeting Record.

During the October 2012 water sampling event, composite water samples were collected at Dolores River cross sections DR-1, DR-2, DR-7, and DR-4-SW. The sample was collected in accordance with the procedures outlined in Section 8.2 of the Collection of Cross-Channel Surface Water Samples SOP, found in Appendix K. Each cross section was divided up into several compartments as determined by on-site sampling technicians. Field parameters and flowrates were collected at each compartment. An individual aliquot was also collected at each compartment and combined into a composite sample. The composite sample was then handled and analyzed per protocols identified in the Sampling and Analysis Plan (SAP). A summary of the field parameters and flowrates for the composite samples can be found in Tables 3B, 3C, 3D, and 3E of Appendix B.

All sample bottles were labeled to identify sample number, date and time of collection, type of analysis, and appropriate preservative. In addition, sample analysis/chain of custody forms were completed and processed at the time of sample collection. Original chain of custody forms are signed, dated, and placed in the sample container prior to sealing the container for shipment.

Water samples were kept in cooled containers and sent to the analytical laboratory. Samples were submitted to Pace Analytical Laboratories in Lenexa, Kansas for analysis by analytical procedures listed on Table 2. Analysis was performed according to methods specified in 40 CFR, Part 136 or other methods approved by the EPA. Laboratory methods and reporting limits for all parameters are presented in Table 2. Laboratory results and supporting documentation including quality assurance results are contained in the Appendix C and Appendix D of this report. Results are summarized in Table 4A, Table 4B, and Table 4C in Appendix B of this report.

TABLE 2 - Analytical Procedures Summary

PARAMETER	DETECTION LIMIT (MDL)	REPORTING LIMIT (RL)	METHOD
FIELD PARAMETERS			
Dissolved Oxygen (ppm)	+/- 1.5% of reading	+/- 1.5% of reading	SM 4500-OG
Electrical Conductivity (mS/cm)	+/- 1% of reading	+/- 1% of reading	EPA 120.1
Temperature (°C)	+/- 0.15° C	+/- 0.15° C	Standard Method 2550
ORP (Oxidation Reduction Potential, mV)	+/- 1.0 mV	+/- 1.0 mV	Ag/AgCl Probe
pH (Standard pH Units)	+/- 0.02 pH	+/- 0.02 pH	EPA 150.2
NON-METALS			
Alkalinity (mg/L as CaCO ₃)	20 mg/L	20 mg/L	SM 2320B
Chloride (mg/L)	1.0 mg/L	1.0 mg/L	EPA 300.0
Cyanide (μg/L as CN)	0.0021 mg/L	0.005 mg/L	SM 4500-CN-E
Hardness (mg/L as CaCO ₃)	0.036 mg/L	0.071 mg/L	SM 2340B
Nitrate	0.022 mg/L	0.1 mg/L	EPA 353.2
Salinity (mg/L as dissolved solids)		6 mg/L	SM 2510B (calculated)
Silica	0.027 mg/L	0.054 mg/L	EPA 200.8
Sulfate (mg/L as SO ₄)	0.15 mg/L	1.0 mg/L	EPA 300.0
Sulfides (mg/L)	0.018 mg/L	0.05 mg/L	4500-S-2 D
Total Dissolved Solids (mg/L as TDS)	5.0 mg/L	5.0 mg/L	SM 2540C
Total Organic Carbon (mg/L)	0.072 mg/L	0.5 mg/L	SM 5310C
Total Suspended Solids (mg/L as TSS)	5.0 mg/L	5.0 mg/L	SM 2540D
TOTAL, DISSOLVED, AND POTENTIALLY DISSOLVED METALS*			
Aluminum (μg/L as Al)	2.0 μg/L, 5.2 μg/L	4.0 μg/L, 50 μg/L	EPA 200.8, EPA 200.8
Antimony (μg/L as Sb)	0.1 μg/L, 0.036 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Arsenic (μg/L as As)	0.14 μg/L, 0.14 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Barium (μg/L as Ba)	0.15 μg/L, 0.084 μg/L	0.3 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Beryllium (μg/L as Be)	0.092 μg/L, 0.065 μg/L	0.02 μg/L, 0.5 μg/L	EPA 200.8, EPA 200.8
Cadmium (μg/L as Cd)	0.028 μg/L, 0.096 μg/L	0.08 μg/L, 0.5 μg/L	EPA 200.8, EPA 200.8
Calcium (μg/L as Ca)	10 μg/L, 7.1 μg/L	20 μg/L, 100 μg/L	EPA 200.8, EPA 200.7
Chromium (ug/l as Cr)	0.094 μg/L, 0.11 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Cobalt (ug/l as Co)	0.25 μg/L, 0.048 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Copper (μg/L as Cu)	0.18 μg/L, 0.44 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Iron (μg/L as Fe)	10 μg/L, 4.6 μg/L	50 μg/L, 50 μg/L	EPA 200.8, EPA 200.8
Lead (μg/L as Pb)	0.018 μg/L, 0.052 μg/L	0.1 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Magnesium (μg/L as Mg)	2.3 μg/L, 10 μg/L	5.0 μg/L, 50 μg/L	EPA 200.8, EPA 200.7
Manganese (μg/L as Mn)	0.25 μg/L, 0.24 μg/L	5.0 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Mercury (μg/L as Hg)	0.037 μg/L, 0.053 μg/L	0.2 μg/L, 1.0 μg/L	EPA 245.1, EPA 245.1
Molybdenum (μg/L as Mo)	0.069 μg/L, 0.16 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Nickel (μg/L as Ni)	0.15 μg/L, 0.36 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Potassium (μg/L as K)	5.2 μg/L, 63.4 μg/L	20 μg/L, 500 μg/L	EPA 200.8, EPA 200.7
Selenium (ug/l as Se)	0.094 μg/L, 0.36 μg/L	0.5 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Silver (ug/L as Ag)	0.04 μg/L, 0.06 μg/L	0.5 μg/L, 0.5 μg/L	EPA 200.8, EPA 200.8
Sodium (μg/L as Na)	10.4 μg/L, 14.2 μg/L	50 μg/L, 500 μg/L	EPA 200.8, EPA 200.7
Thallium (μg/L as Tl)	0.019 μg/L, 0.022 μg/L	0.1 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Vanadium (μg/L as V)	0.037 μg/L, 0.28 μg/L	0.1 μg/L, 1.0 μg/L	EPA 200.8, EPA 200.8
Zinc (μg/L as Zn)	1.0 μg/L, 1.6 μg/L	5.0 μg/L, 10 μg/L	EPA 200.8, EPA 200.8

*Limits and methods for metals displayed in following format: Total and Dissolved Metals, Potentially Dissolved Metals

4.0 Flow Measurement Methods

Flow velocity measurements were taken at the river sampling locations where accessible. Flow measurements were not collected at areas where ice and snow buildup or high, fast flows prohibited safe access. The flow measurements obtained this sampling period are described in Section 2.3. Flowrates were measured for sampling locations DR-1, DR-2, DR-3, DR-6, DR-7, DR-4-SW, and DR-G. Refer to Figures 3 through 8 in Appendix E for Dolores River cross sections. The flowrates are presented on Table 3A in Appendix B.

Flow velocity measurements collected during this sampling event were taken by use of a Global Water Flow Probe FP211 portable flow meter at stations DR-1, DR-2, DR-7, DR-4-SW, and DR-G using the six-tenths-depth method. This method uses the velocity at six-tenths of the depth as the mean velocity. This method is generally reliable between depths from 0.3 feet to 2.5 feet. Stream sections were selected with the desired characteristics of parallel flows, smooth streambed with minimal obstructions, a straight channel, and a flat streambed. The stream section, perpendicular to the flow was measured in feet. The width of the section was determined and divided into several sub-sections. Flow measurements of velocity (by the six-tenths-depth method) and water depth were measured at each vertical section using the Global Water Flow Probe FP211. The flow meter was set to the 5 second fixed period average mode. A minimum of three velocity readings were recorded at each vertical section. Flows were calculated for each stream section using the water depth, horizontal distance, and averaged velocity data.

The St. Louis tunnel flow (DR-3) and St. Louis pond discharge (DR-6) currently have Parshall flumes installed. Flow measurements can be determined at these flumes when the depth of flow is known at a particular point. In order to continuously monitor and measure the depth of flow, depth measurement devices were installed on May 11th, 2011 and May 12th, 2011 at both the north and south flumes. An STI Ultrasonic IRU-5180 automated water level detector was installed at the north Parshall flume. In order to obtain further flow data, an OTT PLS submersible pressure transducer was installed at the north flume in December 2011. In January 2012, it was decided that the OTT PLS would be used exclusively at the north flume to report flow data, and that the ultrasonic meter would remain only as a backup flow measurement system. This was due in large part to the stability and uniformity observed in the data from the OTT PLS, as opposed to the ultrasonic meter, which exhibited greater instability and variability in the readings than the OTT PLS. The south flume has a submersible pressure transducer called the OTT Orpheus Mini. It records deviations from a pre-programmed depth of air space from the top edge of the flume down to the water level. Knowing then the total depth of the flume, the depth of flow can be determined. The post processed data for the OTT PLS and the OTT Orpheus Mini for the month of October, 2012 is given in Appendix I and Appendix J, respectively.

During the month of October 2012, the data at DR-6 (south flume) experienced several unusual fluctuations and was not consistent. This was primarily due to the beaver activity at the south flume. Beaver dams were partially constructed during the evening hours on several days and temporarily elevated the water level in the flume. This produced inaccurate results. Daily flume inspections continued throughout the month to ensure the flume stays clear and the data accurate.

5.0 Analytical Results

The results of the laboratory analysis are summarized on Table 4A and Table 4B in Appendix B. The data is organized by sample location. Additionally, Table 4C includes the results from the composite water samples collected at locations DR-1, DR-2, DR-7, and DR-4-SW. The Pace lab reports for these results are contained in Appendix C.

6.0 Quality Control

In addition to the standard laboratory Quality Control (QC), field QC samples for this sampling event included a field duplicate and a Field Blank (FB).

6.1 Field QC

A field duplicate water sample was collected from sample location DR-3. During sample collection, the duplicate sample bottles were filled simultaneously from the discharge stream of water. The duplicate sample was submitted to the analytical laboratory with the label of DR-8, so as to serve as a “blind duplicate.”

Table 5 compares the analytical results for total metals portion from DR-3 and DR-8 and presents the Relative Percent Difference (RPD). The RPD for aqueous samples should be +/- 20%. All comparative values were within +/-20% with the exception of chloride.

TABLE 5 – Relative Percent Difference (RPD) of Total Metals Portion Between DR-3 and Duplicate Sample DR-8

Analyte (Total)	DR-3 ($\mu\text{g/L}$)	DR-8 ($\mu\text{g/L}$) Duplicate of DR-3	RPD (%)
Aluminum	230	229	-0.44
Antimony	<0.50	<0.50	-
Arsenic	<0.50	<0.50	-
Barium	19.2	19.6	2.06
Beryllium	0.53	0.48	-9.90
Cadmium	15.3	16.0	4.47
Calcium	224000	218000	-2.71
Chromium	<0.50	<0.50	-
Cobalt	2.5	2.6	3.92
Copper	41.5	41.8	0.72
Iron	4390	4450	1.36
Lead	1.9	1.7	-11.11
Magnesium	19000	19400	2.08
Manganese	1790	1780	-0.56
Mercury	<0.20	<0.20	-
Molybdenum	17.1	17.2	0.58
Nickel	3.9	4.1	5.00
Potassium	75400	65400	-14.20
Selenium	<0.50	<0.50	-
Silver	<0.50	<0.50	-
Sodium	11000	11100	0.90
Thallium	<0.10	<0.10	-
Vanadium	<0.10	<0.10	-
Zinc	3030	2990	-1.33

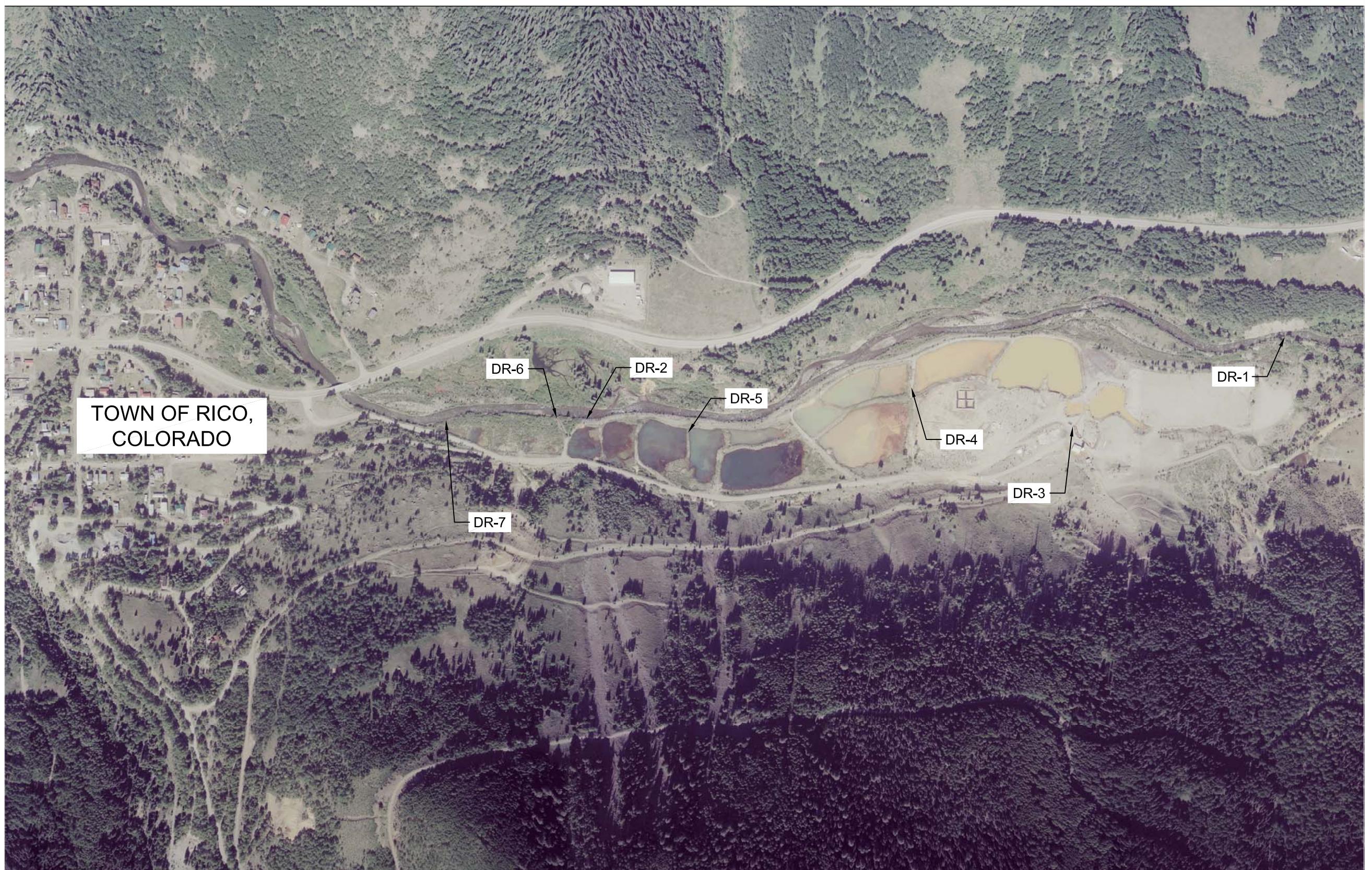
Alkalinity (mg/L)	112	109	-2.71
Chloride (mg/L)	9.3	1.8	-135.14
Cyanide	<0.0050	<0.0050	-
Hardness	637000	624000	-2.06
Nitrate (mg/L)	<0.10	<0.10	-
Salinity (mg/L)	888	833	-6.39
Silica	16400	15700	-4.36
Sulfate (mg/L)	629	630	0.16
Sulfide (mg/L)	<0.050	<0.050	-
TDS (mg/L)	1080	1050	-2.82
TOC (mg/L)	<1.0	<1.0	-
TSS (mg/L)	<5.0	<5.0	-

A Field Blank (FB) was collected by analyzing a bottle of distilled water in the field in the same manner as any other sample. The FB was analyzed for the same constituents as the other samples. The FB had concentrations below the reporting limit for all metals except for a small number of total, dissolved, and potentially dissolved metals. The pH was slightly above neutral, the Electrical Conductivity (EC) was very low, it showed a non-detectable level of alkalinity, and a non-detectable level of TDS.

6.2 Laboratory QC

The laboratory control sample (LCS), method blank, matrix spike, and matrix spike duplicate sample results were all within the established limits of concentration, percent recovery, and relative percent difference, with several minor exceptions. Please refer to the Laboratory QC Results in Appendix D for exceptions and for a full QC report.

Appendix A
Sampling Location Maps



01 ST LOUIS PONDS SAMPLING LOCATIONS

C:\Users\Mark\Documents\R1CC0\Surface Water Sampling\Sample Collection sites.dwg

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General Notes



SCALE IN FEET

o.	Revision / Issue	Date

 ANDERSON
ENGINEERING COMPANY, INC.

RICO SURFACE WATER SAMOPLING

ST. LOIUS PONDS AREA SAMPLING LOCATIONS

RICO,
COLORADO

DRAWN BY:	MAD
ENGINEER:	MAD
APPROVED:	CES

Project	Sheet
Date	5-Apr-12
Scale	1" = 500'



1a SAMPLING LOCATION SOUTH OF RICO, CO
SCALE - 1" = 500'

C:\Users\Mark\Documents\ICO\Surface Water Sampling\Sample Collection sites.dwg
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General Notes

SCALE IN FEET
0 250 500

No.	Revision/Issue	Date
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RICO SURFACE WATER
SAMOPLING
SAMPLING LOCATIONS SOUTH
OF RICO, CO
RICO,
COLORADO

DRAWN BY: MAD
ENGINEER: MAD
APPROVED: CES

Project: Sheet: 1a
Date: 5-Apr-12
Scale: 1" = 500'



02 MONITORING WELL LOCATIONS

SCALE - 1" = 200'

General Notes		
SCALE IN FEET		
0	100	200
No.	Revision/Issue	Date
BP / ARCO		
ANDERSON ENGINEERING COMPANY, INC. 977 WEST 2100 SOUTH SALT LAKE CITY, UTAH 84119 (801) 972-8221		
RICO GW WELL MONITORING		
MONITORING WELL LOCATIONS		
RICO COLORADO		
DRAWN BY:	MAD	
ENGINEER:	MAD	
APPROVED:	CES	
Project	Sheet	2
Date	11-Jun-12	
Scale	1" = 200'	

Appendix B

Data Tables

TABLE 3A - Sampling Field Data and Station Information Summary, October 2012

Sample Location	Date of Sample Collection	Field Technicians	Field Measurements						GPS Location (Colorado State Plane NAD83)		Flow Data		Comments			
			pH	Temp (°C)	EC (mS/cm)	Dissolved Oxygen (ppm)	Oxydation Reduction Potential (ORP, mV)	Well Casing Elevation (ft)	Well Water Elevation (ft)	Northing	Easting	Stream Cross section area (ft^2)	Flowrate cfs / gpm			
DR-1	10/17/2012	Tim Barbee, Ben Loomis	8.09	9.63	0.328	4.17	9.1	NA	NA	1389970.4600	2267573.6490	12.7	9.81	4403	Cross section on the Dolores River above St. Louis settling pond system (approximately 800 ft north of the northern edge of Pond 18). Flow measurement by flowmeter.	
DR-2	10/18/2012	Tim Barbee, Ben Loomis	7.42	8.37	0.450	4.25	18.2	NA	NA	1386660.9610	2267971.4630	19.8	8.81	3954	Cross section on the Dolores River, approximately 150 ft north of system outfall. Flow measurement by flowmeter.	
DR-3	10/17/2012	Tim Barbee, Ben Loomis	6.96	18.94	1.663	2.79	-5.9	NA	NA	1388963.0808	2268004.6974	NA	1.35	606	St Louis adit discharge. Flow measurement by installed Parshall Flume. Water level by installed STI Ultrasonic IRU-5180 water level meter and an OTT PLS submersible pressure transducer.	
DR-4	10/18/2012	Tim Barbee, Ben Loomis	7.42	10.27	1.399	4.32	25.0	NA	NA	1388153.6284	2267799.1579	NA	CNO	-	Pond 15 discharge. Dredging activities in Pond 15 prevented accurate flow data from being collected at this location during this time period.	
DR-5	10/18/2012	Tim Barbee, Ben Loomis	7.47	8.29	1.466	4.48	27.0	NA	NA	1387273.4503	2268024.8524	NA	1.22	548	Pond 8 was discharging at multiple small locations as well as the spillway. Due to the shallow water and multiple paths, accurate flow measurements could not be determined for this sampling location and period. Leakage was estimated by water balance. Flows estimated by water balance and water level reading.	
DR-6	10/18/2012	Tim Barbee, Ben Loomis	7.02	7.20	1.613	4.95	26.8	NA	NA	1386431.4984	2267964.5711	NA	1.08	485	Outfall to Dolores River. Flow measurement by installed Parshall Flume. Water level by OTT Orpheus Mini submersible pressure transducer.	
DR-7	10/18/2012	Tim Barbee, Ben Loomis	7.09	9.32	0.651	4.18	18.4	NA	NA	1385880.1050	2267983.4510	15.3	11.1	4973	Cross section on the Dolores River, approximately 500 ft below St. Louis settling pond system outfall. Flow measurement by flowmeter.	
DR-8	10/17/2012	Tim Barbee, Ben Loomis	7.08	18.28	1.493	3.07	-8.9	NA	NA	1388963.0808	2268004.6974	NA	NA	NA	DR-8 is a duplicate sample of DR-3 (or a location of sampler's choosing). See comments for DR-3.	
DR-4-SW	10/18/2012	Tim Barbee, Ben Loomis	7.43	10.36	0.641	4.14	26.8	NA	NA	1379176.1190	2266285.0850	24.1	18.9	8464	Cross section on the Dolores River approximately 100 below the Silver Swan site. Flow measurement by flowmeter.	
DR-G	10/18/2012	Tim Barbee, Ben Loomis	7.86	7.92	0.516	4.51	19.9	NA	NA	1364029.7850	2258752.9060	13.8	15.2	6822	Cross section on the Dolores River at USGS gauging station #09165000, approximately 3.5 miles downstream of the Silver Swan site. Flow measurement by flowmeter.	
FB	10/18/2012	Tim Barbee, Ben Loomis	7.19	6.54	0.025	4.00	-24.7	NA	NA	NA	NA	NA	NA	NA	Field blank	
GW-1	10/17/2012	Tim Barbee, Ben Loomis	7.39	10.94	0.364	1.13	6.4	8840.13	8837.40	1390006.0210	2267642.6870	NA	NA	NA	Located on the north end of the site, approximately a quarter mile north of the northern edge of Pond 18.	
GW-3	10/18/2012	Tim Barbee, Ben Loomis	6.61	3.25	0.888	2.72	17.2	8836.68	8823.24	1389221.9930	2267708.3940	NA	NA	NA	Located approximately 200 feet north of the northern edge of pond 18, and approximately 60 feet west of the main access road.	
GW-4	10/17/2012	Tim Barbee, Ben Loomis	6.87	11.07	1.593	0.21	0.5	8826.79	8817.02	1388790.0720	2267553.5420	NA	NA	NA	Located on the western flood dike of Pond 18, approximately midway along the dike.	
GW-5	10/17/2012	Tim Barbee, Ben Loomis	7.00	11.02	2.287	0.28	-15.5	8839.52	8818.56	1388802.0650	2267911.8020	NA	NA	NA	Located on the northern edge of the former Pond 17 area, or on the northern dike of the newly constructed drying cell 1.	
GW-6	10/17/2012	Tim Barbee, Ben Loomis	6.43	8.90	2.550	1.76	-28.8	8837.45	8816.67	1388589.3950	2267922.5090	NA	NA	NA	Located on the middle of the former Pond 17 area, or on the western edge of the south dike of the newly constructed drying cell 1.	
GW-7	10/17/2012	Tim Barbee, Ben Loomis	6.50	11.95	1.474	0.52	22.1	8840.00	8817.09	1388611.4370	2268158.0170	NA	NA	NA	GW-7 Located on the eastern edge of the access road directly across from the former Pond 17, or directly across from the newly constructed drying cell 2.	
EB-1	10/17/2012	Tim Barbee, Ben Loomis	6.93	10.05	2.278	0.77	-11.0	8839.86	8818.49	1388792.4420	2267916.9080	NA	NA	NA	Located on the northern edge of the former Pond 17 area, or on the northern dike of the newly constructed drying cell 1. It is within ten feet of GW-5.	
EB-2	10/18/2012	Tim Barbee, Ben Loomis	6.26	9.96	3.164	0.67	-23.3	8829.84	8813.47	1388306.1480	2267920.2500	NA	NA	NA	Located on the southern portion of the former Pond 16 area, or on the western edge of the south dike of the newly constructed drying cell 3.	
MW-1 SHALLOW	10/18/2012	Tim Barbee, Ben Loomis	6.96	13.29	1.326	1.52	20.3	8810.87	8804.68	1387826.7470	2267944.5160	NA	NA	NA	Both wells are located about 4 feet apart on the western embankment of Pond 13 at the division between Pond 11 and Pond 12.	
MW-1 DEEP	10/18/2012	Tim Barbee, Ben Loomis	6.96	12.68	1.322	2.17	18.7	8810.85	8801.59	1387829.4070	2267940.5680	NA	NA	NA	Both wells are located about 4 feet apart on the western embankment of Pond 13 at the division between Pond 11 and Pond 12.	
MW-2 SHALLOW	NA	Tim Barbee, Ben Loomis	DRY						8810.23	NA	1387829.7580	2267759.0810	NA	NA	NA	Both wells are located about 4 feet apart on the western flood embankment of Pond 12, about mid-way along the pond. MW-2 SHALLOW had less than one inch of water.
MW-2 DEEP	10/18/2012	Tim Barbee, Ben Loomis	6.83	13.62	1.369	0.99	15.1	8810.21	8800.09	1387836.0950	2267756.0910	NA	NA	NA	Both wells are located about 4 feet apart on the western flood embankment of Pond 12, about mid-way along the pond. MW-2 SHALLOW had less than one inch of water.	
MW-3 SHALLOW	NA	Tim Barbee, Ben Loomis	DRY						8819.57	NA	1388308.0910	2267603.5420	NA	NA	NA	Both wells are located about 4 feet apart on the western flood embankment of Pond 15, on the southern half of the embankment. MW-3 SHALLOW was dry.
MW-3 DEEP	10/18/2012	Tim Barbee, Ben Loomis	6.94	11.99	1.452	0.83	-4.9	8819.72	8809.73	1388313.2060	2267601.6050	NA	NA	NA	Both wells are located about 4 feet apart on the southern embankment of Pond 13, approximately 60 west of the main east access road.	
MW-4 SHALLOW	10/18/2012	Tim Barbee, Ben Loomis	6.51	13.36	1.409	2.18	29.7	8816.83	8800.11	1387836.9670	2268221.9370	NA	NA	NA	Both wells are located about 4 feet apart on the southern embankment of Pond 13, approximately 60 west of the main east access road.	
MW-4 DEEP	10/18/2012	Tim Barbee, Ben Loomis	6.68	12.27	1.404	2.89	29.2	8816.77	8800.09	1387839.1320	2268224.8950	NA	NA	NA	Both wells are located about 4 feet apart on the western dike of drying cell 3 (refer to Figure 2).	
MW-5 SHALLOW	10/18/2012	Tim Barbee, Ben Loomis	4.70	11.49	3.215	0.39	36.2	8830.95	8814.51	1388369.7050	2267814.3980	NA	NA	NA	Both wells are located about 4 feet apart on the western dike of drying cell 3 (refer to Figure 2).	
MW-5 DEEP	10/18/2012	Tim Barbee, Ben Loomis	6.49	10.02	2.075	0.78	-7.0	8830.73	8813.84	1388374.5740	2267813.8150	NA	NA	NA	Both wells are located about 4 feet apart on northern embankment of Pond 13, approximately 75 feet west of the main east access road.	
MW-6 SHALLOW	10/18/2012	Tim Barbee, Ben Loomis	6.56	10.99	1.389	0.65	3.3	8830.58	8807.68	1388166.1000	2268148.1000	NA	NA	NA	Both wells are located about 4 feet apart on northern embankment of Pond 13, approximately 75 feet west of the main east access road.	
MW-6 DEEP	10/18/2012	Tim Barbee, Ben Loomis	6.42	10.59	1.983	0.70	-4.1	8830.11	8807.25	1388165.5290	2268153.3270	NA	NA	NA	Both wells are located about 4 feet apart on northern embankment of Pond 13, approximately 75 feet west of the main east access road.	

Table 3B - DR-1 Cross Section Composite Sampling Field Data and Flow Information Summary, October 2012

Sample Location			Field Measurements					GPS Location (Colorado State Plane NAD83)		Flow Data					
			pH	Temp (°C)	EC (mS/cm)	Dissolved Oxygen (ppm)	Oxydation Reduction Potential (ORP, mV)			Northing*	Easting*	Compartment Geometry		Average Flowrate	
	Date of Sample Collection	Field Technicians										Width (ft)	Area (ft^2)	cfs	gpm
DR-1_SEC1	10/31/2012	Tim Barbee, Ben Loomis	8.92	5.31	0.318	9.69	34.2	1389969.1580	2267566.6528	4	1.07	0.61	274		
DR-1_SEC2	10/31/2012	Tim Barbee, Ben Loomis	8.88	5.32	0.317	9.63	-22.0	1389968.3480	2267562.7356	4	3.07	4.80	2154		
DR-1_SEC3	10/31/2012	Tim Barbee, Ben Loomis	8.88	5.36	0.317	9.40	-16.5	1389967.5379	2267558.8185	4	2.60	1.38	619		
DR-1_SEC4	10/31/2012	Tim Barbee, Ben Loomis	8.85	5.39	0.317	9.38	-13.9	1389966.7279	2267554.9014	4	3.13	2.42	1086		
DR-1_SEC5	10/31/2012	Tim Barbee, Ben Loomis	8.84	5.44	0.318	9.33	-10.2	1389965.9178	2267550.9843	4	2.53	0.57	256		
DR-1_SEC6	10/31/2012	Tim Barbee, Ben Loomis	8.82	5.52	0.317	8.80	-8.1	1389965.1077	2267547.0672	4	0.27	0.03	13		
DR-1_COMPOSITE	10/31/2012	Tim Barbee, Ben Loomis	8.30	7.57	0.425	6.13	-7.6	-	-	24	12.67	9.81	4402.73		

*Northing and easting values are estimates based on surveyed benchmark on east bank of river at this location

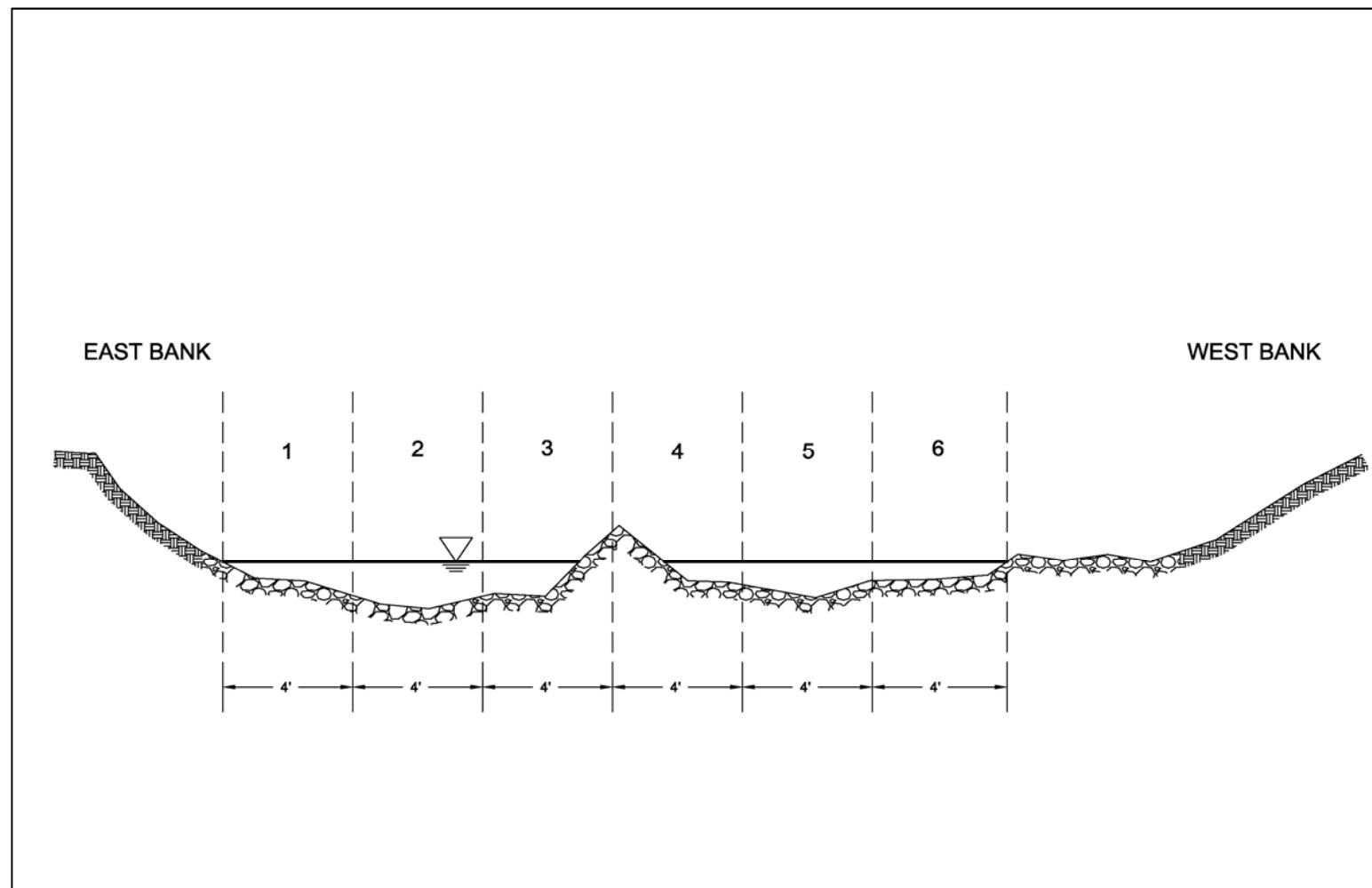


Table 3C - DR-2 Cross Section Composite Sampling Field Data and Flow Information Summary, October 2012

Sample Location			Field Measurements					GPS Location (Colorado State Plane NAD83)		Flow Data					
			pH	Temp (°C)	EC (mS/cm)	Dissolved Oxygen (ppm)	Oxydation Reduction Potential (ORP, mV)			Northing*	Easting*	Compartment Geometry			
												Width (ft)	Area (ft^2)		
DR-2_SEC1	10/31/2012	Tim Barbee, Ben Loomis	8.74	8.87	0.449	8.28	-21.7	1386655.4204	2267949.4851	4	1.34	0.20	90		
DR-2_SEC2	10/31/2012	Tim Barbee, Ben Loomis	8.73	8.68	0.431	8.39	-18.9	1386654.4453	2267945.6058	4	4.26	1.27	570		
DR-2_SEC3	10/31/2012	Tim Barbee, Ben Loomis	8.63	8.60	0.424	8.76	-16.5	1386653.4701	2267941.7264	4	4.61	3.48	1562		
DR-2_SEC4	10/31/2012	Tim Barbee, Ben Loomis	8.55	8.67	0.441	8.62	-15.0	1386652.4950	2267937.8471	4	4.03	2.71	1216		
DR-2_SEC5	10/31/2012	Tim Barbee, Ben Loomis	8.44	8.81	0.462	8.50	-12.9	1386651.5199	2267933.9678	4	3.15	0.86	386		
DR-2_SEC6	10/31/2012	Tim Barbee, Ben Loomis	8.23	9.21	0.528	8.17	-11.6	1386650.5448	2267930.0885	4	1.75	0.29	130		
DR-2_SEC7	10/31/2012	Tim Barbee, Ben Loomis	7.54	10.11	0.689	5.73	-9.4	1386649.5696	2267926.2092	4	0.35	0.00	0		
DR-2_COMPOSITE	10/31/2012	Tim Barbee, Ben Loomis	7.71	10.66	0.612	5.28	-9.2	-	-	28	19.49	8.81	3953.93		

*Northing and easting values are estimates based on surveyed benchmark on east bank of river at this location

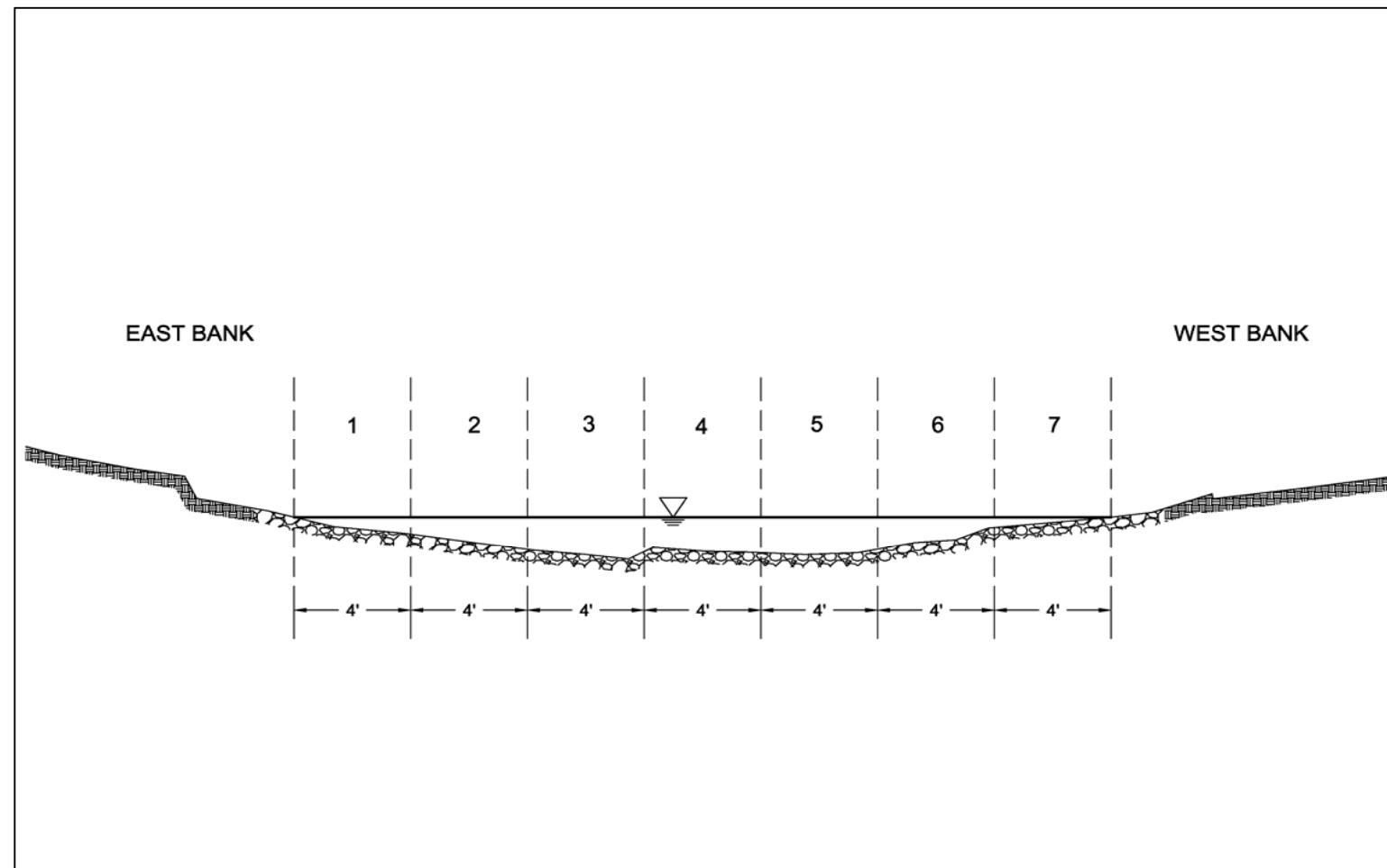


Table 3D - DR-7 Cross Section Composite Sampling Field Data and Flow Information Summary, October 2012

Sample Location			Field Measurements					GPS Location (Colorado State Plane NAD83)		Flow Data					
			pH	Temp (°C)	EC (mS/cm)	Dissolved Oxygen (ppm)	Oxydation Reduction Potential (ORP, mV)			Northing*	Easting*	Compartment Geometry		Average Flowrate	
	Date of Sample Collection	Field Technicians										Width (ft)	Area (ft^2)	cfs	gpm
DR-7_SEC1	10/31/2012	Tim Barbee, Ben Loomis	7.01	9.86	0.656	8.60	5.6	1385879.0593	2267954.5456	6	1.06	0.20	90		
DR-7_SEC2	10/31/2012	Tim Barbee, Ben Loomis	7.02	9.66	0.632	8.96	6.7	1385877.2763	2267948.8166	6	1.86	0.90	404		
DR-7_SEC3	10/31/2012	Tim Barbee, Ben Loomis	7.08	9.45	0.600	8.93	7.3	1385875.4933	2267943.0876	6	3.26	2.55	1144		
DR-7_SEC4	10/31/2012	Tim Barbee, Ben Loomis	7.11	9.37	0.578	8.93	7.9	1385873.7104	2267937.3587	6	2.49	3.75	1683		
DR-7_SEC5	10/31/2012	Tim Barbee, Ben Loomis	7.11	9.42	0.575	8.65	8.8	1385871.9274	2267931.6297	6	1.86	1.38	619		
DR-7_SEC6	10/31/2012	Tim Barbee, Ben Loomis	7.07	9.44	0.573	8.98	9.4	1385870.1445	2267925.9007	6	2.00	1.54	691		
DR-7_SEC7	10/31/2012	Tim Barbee, Ben Loomis	7.00	9.59	0.577	9.00	9.9	1385868.3615	2267920.1717	6	2.00	0.72	323		
DR-7_SEC8	10/31/2012	Tim Barbee, Ben Loomis	6.90	9.38	0.603	8.20	11.2	1385866.5786	2267914.4428	6	0.80	0.03	13		
DR-7_COMPOSITE	10/31/2012	Tim Barbee, Ben Loomis	7.73	11.79	0.721	5.63	-5.5	-	-	48	15.33	11.07	4968		

*Northing and easting values are estimates based on surveyed benchmark on east bank of river at this location

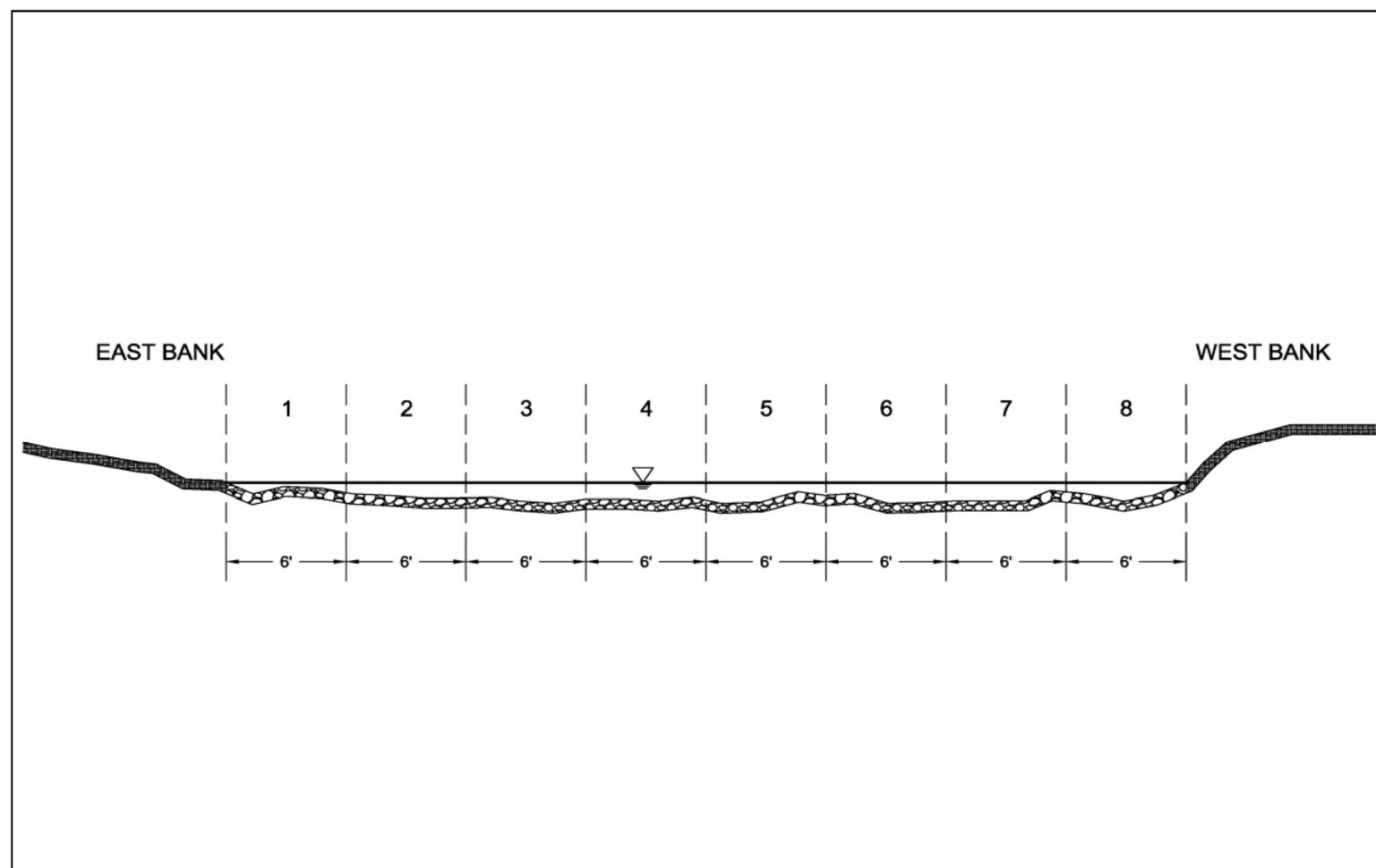


Table 3E - DR-4-SW Cross Section Composite Sampling Field Data and Flow Information Summary, October 2012

Sample Location			Field Measurements					GPS Location (Colorado State Plane NAD83)		Flow Data					
			pH	Temp (°C)	EC (mS/cm)	Dissolved Oxygen (ppm)	Oxydation Reduction Potential (ORP, mV)			Northing*	Easting*	Compartment Geometry		Average Flowrate	
	Date of Sample Collection	Field Technicians										Width (ft)	Area (ft^2)	cfs	gpm
DR-4-SW_SEC1	10/31/2012	Tim Barbee, Ben Loomis	8.23	10.29	0.682	9.01	-19.9	1379182.740	2266270.43	6	2.70	1.19	533		
DR-4-SW_SEC2	10/31/2012	Tim Barbee, Ben Loomis	8.17	10.32	0.682	8.93	-16.6	1379185.189	2266264.95	6	4.92	5.47	2456		
DR-4-SW_SEC3	10/31/2012	Tim Barbee, Ben Loomis	8.13	10.29	0.682	8.90	-13.0	1379187.637	2266259.48	6	4.38	3.64	1632		
DR-4-SW_SEC4	10/31/2012	Tim Barbee, Ben Loomis	8.13	10.24	0.681	8.75	-11.3	1379190.086	2266254.00	6	5.64	5.14	2305		
DR-4-SW_SEC5	10/31/2012	Tim Barbee, Ben Loomis	8.14	10.21	0.681	8.77	-9.9	1379192.535	2266248.52	6	3.36	2.09	937		
DR-4-SW_SEC6	10/31/2012	Tim Barbee, Ben Loomis	8.09	10.12	0.682	8.44	-8.8	1379194.983	2266243.04	6	3.12	1.34	603		
DR-4-SW_COMPOSITE	10/31/2012	Tim Barbee, Ted Barbee	8.01	10.49	0.678	5.09	6.8	-	-	36	24.12	18.86	8466		

*Northing and easting values are estimates based on surveyed benchmark on east bank of river at this location

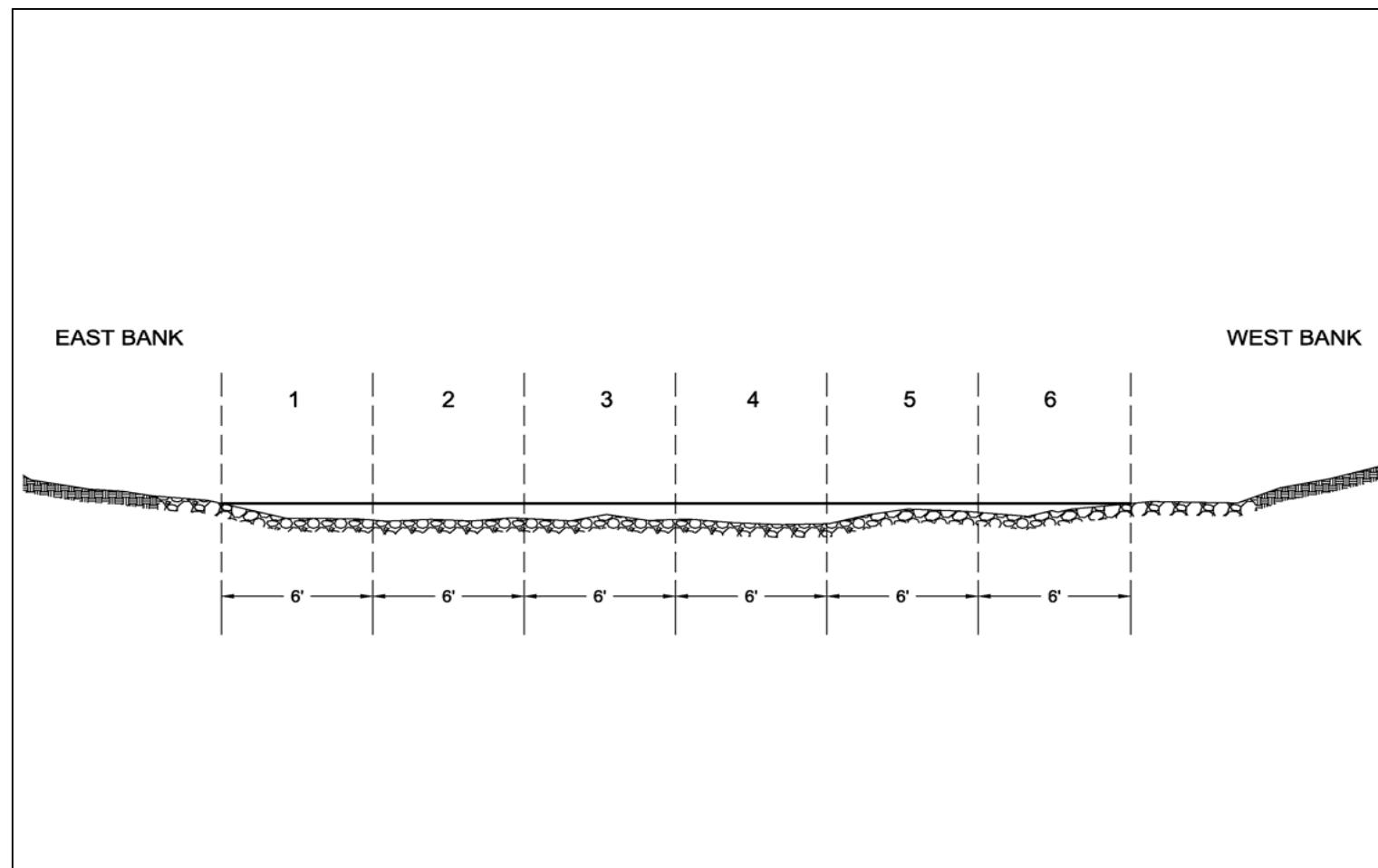


TABLE 4A - Surface Water Analytical Sampling Results Summary, October 2012

		Metals (µg/L)																		Non-Metals (mg/L, unless otherwise indicated)																		
Field Sample ID	Date Collected	Fraction	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Alkalinity	Chloride	Cyanide	Hardness (µg/L as CaCO ₃)	Nitrate	Salinity	Silica	Sulfate	Sulfide	TDS	TOC	TSS
DR-1	10/17/2012	Total	12.0	<0.50	<0.50	74.9	<0.20	<0.080	50300	<0.50	<0.50	<0.50	<0.10	6870	18.2	<0.20	0.94	<0.50	738	<0.50	<0.50	2730	<0.10	0.13	<5.0	95.3	1.4	<0.0050	154000	<0.10	202	6180	56.2	<0.050	179	<1.0	<5.0	
		Dissolved	<4.0	2.4	<0.50	74.9	<0.20	<0.080	50200	<0.50	<0.50	<0.50	<0.10	6870	18.2	<0.20	0.94	<0.50	738	<0.50	<0.50	2730	<0.10	0.13	<5.0													
		Potentially Dissolved	6.9J	0.078J	0.27J	72.4	<0.20	<0.050	44500	0.68J	0.050J	<1.0	51.3	0.25J	6350	17.3	<0.20	1.2	2.0	705	<1.0	0.074J	2780	0.048J	<1.0	7.4J												
DR-2	10/18/2012	Total	12.3	<0.50	<0.50	70.8	<0.20	0.083	72500	<0.50	<0.50	<0.50	<0.10	8700	279	<0.20	1.4	<0.50	1100	<0.50	<0.50	3340	<0.10	<0.10	10.2	105	1.4	<0.0050	217000	<0.10	266	7980	97.2	<0.050	261	<1.0	<5.0	
		Dissolved	4.7	<0.50	<0.50	71.7	<0.20	<0.080	72700	<0.50	<0.50	<0.50	<0.10	8790	264	<0.20	1.3	<0.50	969	<0.50	<0.50	3380	<0.10	<0.10	10.1													
		Potentially Dissolved	9.7J	0.074J	0.31J	74.6	<0.20	<0.050	69500	0.80J	0.10J	1.1	84.8	0.72J	7740	291	<0.20	1.5	0.37J	957	0.38J	<0.50	3380	<1.0	<1.0	23.0												
DR-3	10/17/2012	Total	230	<0.50	<0.50	19.2	0.53	15.3	224000	<0.50	2.5	41.5	4380	1.9	19000	1790	<0.20	17.1	3.9	75400	<0.50	<0.50	11000	<0.10	<0.10	3030	112	9.3	<0.0050	637000	<0.10	888	16400	629	<0.050	1080	<1.0	<5.0
		Dissolved	49.3	<0.50	<0.50	18.7	0.48	14.3	218000	<0.50	2.7	11.3	1470	0.44	18600	1690	<0.20	16.2	6.4	73800	<0.50	<0.50	10800	<0.10	<0.10	2820												
		Potentially Dissolved	211	0.27J	0.37J	18.0	0.50	14.0	190000	0.61J	2.3	36.1	4010	3.2	16800	1640	<0.20	17.8	2.6	67000	<1.0	0.10J	10500	0.12J	<1.0	2420												
DR-4	10/18/2012	Total	1350	0.66	1.7	27.5	1.5	20.8	239000	<0.50	2.9	216	13100	52.8	21700	1850	<0.20	15.9	4.5	53100	0.72	<0.50	10900	<0.10	0.68	4030	104	1.7	<0.0050	686000	<0.10	853	18900	667	<0.050	1080	<1.0	58.0
		Dissolved	6.1	<0.50	<0.50	22.1	<0.20	8.9	250000	<0.50	2.0	2.2	<50.0	<0.10	21400	1420	<0.20	16.5	5.4	56000	<0.50	<0.50	10800	<0.10	<0.10	1650												
		Potentially Dissolved	1120	0.50J	1.5	24.6	1.2	19.3	215000	1.1	2.3	189	11900	50.6	20200	1550	<0.20	7.8	3.3	48800	0.46J	0.42J	11000	0.27J	0.31J	3260												
DR-5	10/18/2012	Total	91.3	<0.50	<0.50	20.3	<0.20	10.5	242000	<0.50	1.7	15.4	1310	2.3	21900	1400	<0.20	14.7	3.2	54400	<0.50	<0.50	11600	<0.10	<0.10	2000	130	1.8	<0.0050	695000	<0.10	870	15900	658	<0.050	1100	<1.0	5.0
		Dissolved	14.0	<0.50	<0.50	20.6	<0.20	10.5	254000	<0.50	1.7	11.3	0.24	21900	1380	<0.20	15.0	5.4	57200	<0.50	<0.50	11700	<0.10	<0.10	1880													
		Potentially Dissolved	69.0	0.18J	0.34J	18.6	0.8J	9.2	221000	0.68J	1.5	12.4	1160	2.5	20700	1260	<0.20	14.4	2.0	50100	0.36J	<0.50	11200	0.067J	<1.0	1560												
DR-6	10/18/2012	Total	38.0	<0.50	<0.50	21.9	<0.20	8.0	270000	<0.50	1.4	5.5	644	1.7	28300	1380	<0.20	13.3	3.0	42700	<0.50	<0.50	16200	<0.10	<0.10	1780	171	1.8	<0.0050	791000	<0.10	939	2					

TABLE 4B - Groundwater Analytical Sampling Results Summary, October 2012

		Metals (µg/L)																				Non-Metals (mg/L, unless otherwise indicated)																
Field Sample ID	Date Collected	Fraction	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Alkalinity	Chloride	Cyanide	Hardness (µg/L as CaCO ₃)	Nitrate	Salinity	Silica	Sulfate	Sulfide	TDS	TOC	TSS
GW-1	10/17/2012	Total	6690	0.57	11.2	216	0.48	1.5	57200	7.4	8.3	51.2	13300	43.0	9480	1480	<0.20	3.6	14.0	2460	1.2	0.74	2640	0.24	15.8	134	106	1.5	<0.0050	182000	<0.10	216	30900	58.5	<0.050	196	<1.0	302
		Dissolved	4.9	<0.50	-0.50	68.9	<0.20	<0.000	56200	<0.50	0.36	50.0	<0.10	6330	2.7	<0.20	1.2	6.9	3850	2.9	0.62	3320	0.13	10.3	37.2													
GW-3	10/18/2012	Total	4960	<0.50	8.2	11.1	0.40	2.1	156000	1.5	4.6	52.3	8820	11.6	20800	1550	<0.20	1.2	3.0	3070	1.4	<0.50	3190	<0.10	0.61	97.0	211	1.5	<0.0050	474000	<0.10	520	30800	216	<0.050	549	<1.0	412
		Potentially Dissolved	651	0.14J	1.1	108	0.17J	0.56	53500	1.3	1.3	11.4	1150	11.0	6460	290	<0.20	0.24J	2.5	888	0.40J	0.28J	2300	0.10J	1.6	36.3												
GW-4	10/17/2012	Total	18500	<0.50	2.5	65.7	<0.20	0.83	292000	2.6	2.2	10.1	5960	11.7	34800	1010	<0.20	11.0	2.9	2680	<0.50	0.50	8420	0.10	4.0	194	99.1	1.9	<0.0050	874000	<0.10	996	17200	762	<0.050	1240	<1.0	100
		Dissolved	5.7	<0.50	0.62	42.4	<0.20	0.24	284000	<0.50	1.4	1.1	2300	<0.10	33100	947	<0.20	11.0	3.1	2300	<0.50	0.50	8430	<0.10	4.77	99.1												
GW-5	10/17/2012	Total	3100	1.0	148	32.7	0.42	35.0	481000	2.9	17.4	400	26700	47.20	44400	6910	<0.20	11.6	21.3	5870	0.91	16.4	6620	0.53	5.0	19600	150	1.7	<0.0050	1380000	<0.10	1430	42200	1250	<0.050	1990	<1.0	238
		Dissolved	33.3	<0.50	55.9	14.8	<0.20	3.6	493000	0.57	12.3	2.5	9900	42.8	45600	5970	<0.20	7.9	16.3	5820	<0.50	0.50	6800	<0.10	3.0	13700												
GW-6	10/17/2012	Total	19400	2.8	263	178	2.7	45.4	420000	23.8	18.8	583	20800	7270	86800	19900	<0.20	16.6	28.5	22000	4.0	19.2	5170	1.0	37.7	14900	54.0	1.5	<0.0050	1410000	0.30	1320	98800	1390	<0.050	2000	1.2	1070
		Dissolved	803	<0.50	104	36.7	0.86	2.0	395000	1.2	3.2	18.7	121000	237	75000	15600	<0.20	9.2	6.2	19500	<0.50	0.63	5070	<0.10	1.3	7250												
GW-7	10/17/2012	Total	17600	1.0	22.9	51.9	2.0	8.0	299000	24.6	6.4	273	43700	1040	35900	319	<0.20	6.5	17.8	4720	12.6	4.1	7570	0.51	19.8	1300	235	1.3	<0.0050	893000	0.47	897	53600	567	<0.050	1050	1.6	1320
		Dissolved	93.7	<0.50	<0.50	13.6	<0.20	3.7	267000	<0.50	0.96	6.0	<0.50	6.6	26900	32.5	<0.20	1.1	4.8	2700	1.7	<0.50	7800	<0.10	191	235												
EB-1	10/17/2012	Total	322	<0.50	4.7	15.9	<1.0	0.73	510000	<2.5	5.6	14.6	7740	94.6	31300	4360	<0.20	12.9	5.2	5960	<2.5	<2.5	6960	<0.50	0.57	1670	185	1.9	<0.0050	1400000	<0.10	1350	25300	1150	<0.050	1900	<1.0	22.0
		Dissolved	<20.0	<2.5	3.0	13.2	<1.0	<0.40	510000	<2.5	5.7	2.5	5460	1.1	3200	4600	<0.20	13.5	7.8	6070	<2.5	<2.5	7210	<0.50	0.50	1510												
EB-2	10/18/2012	Total	14000	<2.5	229	14.3	6.1	2.1	356000	<2.5	58.4	32.2	530000	345	129000	28200	<0.20	4.0	85.4	854	2.5	<2.5	7030	<0.50	0.72	43000	68.6	4.0	<0.0050	1420000	<0.10	1940	36900	3370	<0.050	3580	<1.0	153
		Dissolved	13900	<2.5	214	11.1	6.7	<0.40	360000	<2.5	61.1	6.0	526000	1.																								

TABLE 4C - Dolores River Composite Sampling Analytical Sampling Results Summary, October 2012

		Metals (µg/L)																			Non-Metals (mg/L, unless otherwise indicated)																	
Field Sample ID	Date Collected	Fraction	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Alkalinity	Chloride	Cyanide	Hardness (µg/L as CaCO ₃)	Nitrate	Salinity	Silica	Sulfate	Sulfide	TDS	TOC	TSS
DR-1 COMP	10/31/2012	Total	47.3	<0.50	<0.50	74.9	<0.20	<0.000	56200	0.50	<0.50	0.76	128	0.27	7970	27.2	<0.20	1.1	<0.50	4190	<0.50	2780	<0.10	0.18	<5.0	111	4.0	<0.0050	173000	0.18	233	6820	67.8	<0.050	226	<1.0	<5.0	
		Dissolved	<4.0	<0.50	<0.50	71.6	<0.20	<0.000	56200	<0.50	<0.50	0.66J	0.075J	0.98J	76.8	0.92J	6900	23.9	<0.20	1.1	<0.50	4520	<0.50	2790	<0.10	<0.10	<5.0											
DR-2 COMP	10/31/2012	Total	28.9	<0.50	<0.50	72.8	<0.20	<0.000	91400	<0.50	<0.50	0.87	252	0.36	10800	315	<0.20	1.6	<0.50	7650	<0.50	4320	<0.10	0.15	10.8	131	6.0	0.011	273000	0.10	335	9840	126	<0.050	331	<1.0	<5.0	
		Dissolved	<4.0	<0.50	<0.50	70.1	<0.20	<0.000	82500	<0.50	<0.50	0.92	87.7	<0.10	10000	293	<0.20	1.5	1.1	7760	<0.50	4270	<0.10	<0.10	9.1													
DR-7 COMP	10/31/2012	Total	10.8	<0.50	0.79	68.1	<0.20	1.1	106000	<0.50	<0.50	0.83	260	0.17	13800	435	<0.20	3.0	0.56	9410	0.52	<0.50	6650	<0.10	<0.10	207	151	2.8	<0.0050	322000	<0.10	417	12500	193	<0.050	447	<1.0	<5.0
		Dissolved	4.4	<0.50	0.65	65.0	<0.20	1.1	106000	<0.50	<0.50	1.0	134	<0.10	12800	405	<0.20	3.0	1.7	8830	<0.50	6500	<0.10	<0.10	1.86													
DR-4-SW COMP	10/31/2012	Potentially Dissolved	12.0J	0.098J	0.77J	62.3	0.00J	0.90	92400	0.59J	0.28J	0.73J	238	0.25J	11900	403	<0.20	2.7	<1.0	8580	0.39J	0.11J	5960	0.085J	<1.0	1.66	170	2.0	0.0057	425000	<0.10	446	14000	229	<0.050	515	<1.0	<5.0
		Total	19.2	<0.50	0.64	76.1	<0.20	1.4	144000	<0.50	<0.50	1.0	162	0.40	15800	489	<0.20	3.4	0.91	9500	<0.50	7610	<0.10	<0.10	278													
		Dissolved	9.7	<0.50	0.65	75.7	<0.20	1.4	144000	<0.50	0.69	1.7	51.9	0.16	15700	506	<0.20	3.4	1.7	9450	<0.50	7620	<0.10	<0.10	266													
		Potentially Dissolved	20.0J	0.084J	0.65J	72.4	<0.50	1.3	109000	0.70J	0.37J	0.93J	177	1.8	13900	494	<0.20	3.0	<1.0	8830	<1.0	7170	0.046J	<1.0	226													

Appendix C

Project Narrative and Laboratory Analytical Reports

December 05, 2012

Mark DeFriez
Anderson Engineering Company I
977 W 2100 S.
Salt Lake City, UT 84119

RE: Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Dear Mark DeFriez:

Enclosed are the analytical results for sample(s) received by the laboratory on October 22, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Heather Wilson

heather.wilson@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: OCTOBER 2012 RICO WATER SAMPLI
 Pace Project No.: 60131713

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
 A2LA Certification #: 2926.01
 Alaska Certification #: UST-078
 Alaska Certification #MN00064
 Arizona Certification #: AZ-0014
 Arkansas Certification #: 88-0680
 California Certification #: 01155CA
 Colorado Certification #Pace
 Connecticut Certification #: PH-0256
 EPA Region 8 Certification #: Pace
 Florida/NELAP Certification #: E87605
 Georgia Certification #: 959
 Hawaii Certification #Pace
 Idaho Certification #: MN00064
 Illinois Certification #: 200011
 Kansas Certification #: E-10167
 Louisiana Certification #: 03086
 Louisiana Certification #: LA080009
 Maine Certification #: 2007029
 Maryland Certification #: 322
 Michigan DEQ Certification #: 9909
 Minnesota Certification #: 027-053-137
 Mississippi Certification #: Pace

Montana Certification #: MT CERT0092
 Nevada Certification #: MN_00064
 Nebraska Certification #: Pace
 New Jersey Certification #: MN-002
 New York Certification #: 11647
 North Carolina Certification #: 530
 North Dakota Certification #: R-036
 North Dakota Certification #: R-036A
 Ohio VAP Certification #: CL101
 Oklahoma Certification #: 9507
 Oregon Certification #: MN200001
 Oregon Certification #: MN300001
 Pennsylvania Certification #: 68-00563
 Puerto Rico Certification
 Tennessee Certification #: 02818
 Texas Certification #: T104704192
 Utah Certification #: MN00064
 Virginia/DCLS Certification #: 002521
 Virginia/VELAP Certification #: 460163
 Washington Certification #: C754
 West Virginia Certification #: 382
 Wisconsin Certification #: 999407970

Montana Certification IDs

602 South 25th Street, Billings, MT 59101
 EPA Region 8 Certification #: 8TMS-Q
 Idaho Certification #: MT00012
 Montana Certification #: MT CERT0040

NVLAP Certification #: 101292-0
 Minnesota Dept of Health Certification #: 030-999-442
 Washington Department of Ecology #: C993

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
 A2LA Certification #: 2456.01
 Arkansas Certification #: 12-019-0
 Illinois Certification #: 002885
 Iowa Certification #: 118
 Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
 Nevada Certification #: KS000212008A
 Oklahoma Certification #: 9205/9935
 Texas Certification #: T104704407-12-3
 Utah Certification #: KS000212012-2

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SAMPLE SUMMARY

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60131713001	DR-1_20121017	Water	10/17/12 16:01	10/22/12 10:20
60131713002	DR-2_20121017	Water	10/18/12 12:38	10/22/12 10:20
60131713003	DR-3_20121017	Water	10/17/12 15:30	10/22/12 10:20
60131713004	DR-4_20121017	Water	10/17/12 12:29	10/22/12 10:20
60131713005	DR-5_20121017	Water	10/18/12 12:46	10/22/12 10:20
60131713006	DR-6_20121017	Water	10/18/12 12:17	10/22/12 10:20
60131713007	DR-7_20121017	Water	10/18/12 12:56	10/22/12 10:20
60131713008	DR-8_20121017	Water	10/17/12 15:50	10/22/12 10:20
60131713009	DR-4-SW_20121017	Water	10/18/12 01:09	10/22/12 10:20
60131713010	DR-G_20121017	Water	10/18/12 01:31	10/22/12 10:20
60131713011	FB_20121017	Water	10/18/12 10:45	10/22/12 10:20
60131713012	GW-1_20121017	Water	10/17/12 15:58	10/22/12 10:20
60131713013	GW-3_20121017	Water	10/18/12 10:27	10/22/12 10:20
60131713014	GW-4_20121017	Water	10/18/12 16:50	10/22/12 10:20
60131713015	GW-5_20121017	Water	10/17/12 16:17	10/22/12 10:20
60131713016	GW-6_20121017	Water	10/17/12 17:02	10/22/12 10:20
60131713017	GW-7_20121017	Water	10/17/12 16:41	10/22/12 10:20
60131713018	EB-1_20121017	Water	10/17/12 16:26	10/22/12 10:20
60131713019	EB-2_20121017	Water	10/18/12 09:47	10/22/12 10:20
60131713020	MW-1 SHALLOW_20121017	Water	10/18/12 11:36	10/22/12 10:20
60131713021	MW-1 DEEP_20121017	Water	10/18/12 11:28	10/22/12 10:20
60131713022	MW-2 DEEP_20121017	Water	10/18/12 11:09	10/22/12 10:20
60131713023	MW-3 DEEP_20121017	Water	10/18/12 09:26	10/22/12 10:20
60131713024	MW-4 SHALLOW_20121017	Water	10/18/12 11:45	10/22/12 10:20
60131713025	MW-4 DEEP_20121017	Water	10/18/12 11:55	10/22/12 10:20
60131713026	MW-5 SHALLOW_20121017	Water	10/18/12 10:16	10/22/12 10:20
60131713027	MW-5 DEEP_20121017	Water	10/18/12 10:37	10/22/12 10:20
60131713028	MW-6 SHALLOW_20121017	Water	10/18/12 11:01	10/22/12 10:20
60131713029	MW-6 DEEP_20121017	Water	10/18/12 10:54	10/22/12 10:20
60131713030	BAH-01_20121017	Water	10/19/12 11:10	10/22/12 10:20
60131714003	BAH-01_20121017 SOIL	Solid	10/19/12 11:10	10/22/12 10:20

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713001	DR-1_20121017	EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
60131713002	DR-2_20121017	EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
60131713003	DR-3_20121017	EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713004	DR-4_20121017	EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
60131713005	DR-5_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713006	DR-6_20121017	EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
60131713007	DR-7_20121017	SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713008	DR-8_20121017	SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
60131713009	DR-4-SW_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713010	DR-G_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
60131713011	FB_20121017	EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713012	GW-1_20121017	SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
60131713013	GW-3_20121017	SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
60131713014	GW-4_20121017				

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713015	GW-5_20121017	EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
60131713016	GW-6_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713017	GW-7_20121017	EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
60131713018	EB-1_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713019	EB-2_20121017	SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
60131713020	MW-1 SHALLOW_20121017	SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713021	MW-1 DEEP_20121017	SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
60131713022	MW-2 DEEP_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713023	MW-3 DEEP_20121017	EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
60131713024	MW-4 SHALLOW_20121017	SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713025	MW-4 DEEP_20121017	SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
60131713026	MW-5 SHALLOW_20121017	SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
60131713027	MW-5 DEEP_20121017	Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713028	MW-6 SHALLOW_20121017	EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
60131713029	MW-6 DEEP_20121017	EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M

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SAMPLE ANALYTE COUNT

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60131713030	BAH-01_20121017	EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	JML	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 200.7	SMW	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP, SMW	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TJT	1	PASI-K
60131714003	BAH-01_20121017 SOIL	SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	JML	1	PASI-K
		EPA 6020	RJS	24	PASI-M
		EPA 7471	TEM	1	PASI-M
		ASTM D2974	JDL	1	PASI-M

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.7**

Description: 200.7 Potentially Diss. Metals

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 200.7. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.7 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/20296

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713021

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1091364)
 - Calcium, Dissolved
- MSD (Lab ID: 1091365)
 - Calcium, Dissolved

Additional Comments:

Analyte Comments:

QC Batch: MPRP/20181

B: Analyte was detected in the associated method blank.

- FB_20121017 (Lab ID: 60131713011)
 - Calcium, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 MET ICPMS

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/36003

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713001,60131713011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1319524)
 - Calcium
 - Total Hardness by 2340B

QC Batch: MPRP/36004

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10211718001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1319528)
 - Total Hardness by 2340B
- MSD (Lab ID: 1319529)
 - Total Hardness by 2340B

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: EPA 200.8

Description: 200.8 MET ICPMS

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

QC Batch: MPRP/36287

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713028

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1328208)
 - Total Hardness by 2340B
- MSD (Lab ID: 1328209)
 - Silica
 - Total Hardness by 2340B

QC Batch: MPRP/36414

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10210196001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1332088)
 - Total Hardness by 2340B
- MSD (Lab ID: 1332089)
 - Total Hardness by 2340B

Additional Comments:

Analyte Comments:

QC Batch: MPRP/36003

B: Analyte was detected in the associated method blank.

- DR-1_20121017 (Lab ID: 60131713001)
 - Aluminum
- DR-2_20121017 (Lab ID: 60131713002)
 - Aluminum
- DR-4-SW_20121017 (Lab ID: 60131713009)
 - Aluminum
- DR-7_20121017 (Lab ID: 60131713007)
 - Aluminum
- DR-G_20121017 (Lab ID: 60131713010)
 - Aluminum
- FB_20121017 (Lab ID: 60131713011)
 - Aluminum
 - Calcium
 - Potassium
 - Magnesium

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- EB-1_20121017 (Lab ID: 60131713018)
 - Silver
 - Beryllium
 - Chromium
 - Antimony
 - Selenium
 - Thallium

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 MET ICPMS

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

Analyte Comments:

QC Batch: MPRP/36003

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- EB-2_20121017 (Lab ID: 60131713019)
 - Silver
 - Chromium
 - Molybdenum
 - Antimony
 - Selenium
 - Thallium

QC Batch: MPRP/36004

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1319528)
 - Calcium
- MSD (Lab ID: 1319529)
 - Calcium

P8: Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

- BLANK (Lab ID: 1319526)
 - Copper

QC Batch: MPRP/36287

B: Analyte was detected in the associated method blank.

- MW-1 DEEP_20121017 (Lab ID: 60131713021)
 - Thallium
- MW-2 DEEP_20121017 (Lab ID: 60131713022)
 - Copper
 - Thallium
- MW-4 DEEP_20121017 (Lab ID: 60131713025)
 - Copper
 - Thallium
- MW-5 DEEP_20121017 (Lab ID: 60131713027)
 - Cadmium
 - Copper
 - Thallium
- MW-6 SHALLOW_20121017 (Lab ID: 60131713028)
 - Copper

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1328208)
 - Calcium
 - Manganese
- MSD (Lab ID: 1328209)
 - Calcium
 - Manganese

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: EPA 200.8

Description: 200.8 MET ICPMS

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

Analyte Comments:

QC Batch: MPRP/36414

B: Analyte was detected in the associated method blank.

- BAH-01_20121017 (Lab ID: 60131713030)
 - Copper

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1332088)
 - Sodium
- MSD (Lab ID: 1332089)
 - Sodium

P8: Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

- BLANK (Lab ID: 1332086)
 - Copper
 - Lead
 - Zinc

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 MET ICPMS, Dissolved

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/36001

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713001,60131713011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1319514)
 - Calcium, Dissolved
- MSD (Lab ID: 1319515)
 - Calcium, Dissolved

Additional Comments:

Analyte Comments:

QC Batch: MPRP/36001

B: Analyte was detected in the associated method blank.

- DR-1_20121017 (Lab ID: 60131713001)
 - Lead, Dissolved
 - Thallium, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 MET ICPMS, Dissolved

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

Analyte Comments:

QC Batch: MPRP/36001

B: Analyte was detected in the associated method blank.

- DR-2_20121017 (Lab ID: 60131713002)
 - Lead, Dissolved
- DR-3_20121017 (Lab ID: 60131713003)
 - Thallium, Dissolved
- DR-4-SW_20121017 (Lab ID: 60131713009)
 - Lead, Dissolved
 - Thallium, Dissolved
- DR-4_20121017 (Lab ID: 60131713004)
 - Lead, Dissolved
 - Thallium, Dissolved
- DR-5_20121017 (Lab ID: 60131713005)
 - Thallium, Dissolved
- DR-6_20121017 (Lab ID: 60131713006)
 - Thallium, Dissolved
- DR-7_20121017 (Lab ID: 60131713007)
 - Lead, Dissolved
 - Thallium, Dissolved
- DR-8_20121017 (Lab ID: 60131713008)
 - Lead, Dissolved
 - Thallium, Dissolved
- DR-G_20121017 (Lab ID: 60131713010)
 - Lead, Dissolved
- FB_20121017 (Lab ID: 60131713011)
 - Lead, Dissolved
- GW-1_20121017 (Lab ID: 60131713012)
 - Lead, Dissolved
- GW-3_20121017 (Lab ID: 60131713013)
 - Thallium, Dissolved
- GW-4_20121017 (Lab ID: 60131713014)
 - Lead, Dissolved
 - Thallium, Dissolved
- GW-5_20121017 (Lab ID: 60131713015)
 - Thallium, Dissolved
- GW-6_20121017 (Lab ID: 60131713016)
 - Thallium, Dissolved
- GW-7_20121017 (Lab ID: 60131713017)
 - Thallium, Dissolved
- MW-1 SHALLOW_20121017 (Lab ID: 60131713020)
 - Thallium, Dissolved

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- EB-1_20121017 (Lab ID: 60131713018)
 - Silver, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 MET ICPMS, Dissolved

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

Analyte Comments:

QC Batch: MPRP/36001

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- EB-1_20121017 (Lab ID: 60131713018)

- Aluminum, Dissolved
- Beryllium, Dissolved
- Cadmium, Dissolved
- Chromium, Dissolved
- Copper, Dissolved
- Antimony, Dissolved
- Selenium, Dissolved
- Thallium, Dissolved
- Vanadium, Dissolved

- EB-2_20121017 (Lab ID: 60131713019)

- Silver, Dissolved
- Cadmium, Dissolved
- Chromium, Dissolved
- Copper, Dissolved
- Antimony, Dissolved
- Selenium, Dissolved
- Thallium, Dissolved
- Vanadium, Dissolved

QC Batch: MPRP/36002

B: Analyte was detected in the associated method blank.

- MW-2 DEEP_20121017 (Lab ID: 60131713022)
 - Lead, Dissolved
- MW-3 DEEP_20121017 (Lab ID: 60131713023)
 - Lead, Dissolved
- MW-4 DEEP_20121017 (Lab ID: 60131713025)
 - Lead, Dissolved
- MW-4 SHALLOW_20121017 (Lab ID: 60131713024)
 - Lead, Dissolved
- MW-6 DEEP_20121017 (Lab ID: 60131713029)
 - Lead, Dissolved

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1319519)
 - Calcium, Dissolved
- MSD (Lab ID: 1319520)
 - Calcium, Dissolved

QC Batch: MPRP/36546

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 1338645)
 - Zinc, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 MET ICPMS, Dissolved

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

Analyte Comments:

QC Batch: MPRP/36546

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MSD (Lab ID: 1338646)
- Zinc, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 Potentially Diss. Metals

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 200.8. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.8 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/20183

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713002,60131713011

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1087082)
- Manganese, Dissolved

QC Batch: MPRP/20184

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713021,60131713026

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1087087)
- Aluminum, Dissolved
- Antimony, Dissolved
- Arsenic, Dissolved
- Barium, Dissolved
- Beryllium, Dissolved
- Cadmium, Dissolved
- Chromium, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 Potentially Diss. Metals

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

QC Batch: MPRP/20184

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713021,60131713026

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Cobalt, Dissolved
- Copper, Dissolved
- Iron, Dissolved
- Lead, Dissolved
- Manganese, Dissolved
- Molybdenum, Dissolved
- Nickel, Dissolved
- Selenium, Dissolved
- Silver, Dissolved
- Thallium, Dissolved
- Vanadium, Dissolved
- Zinc, Dissolved
- MS (Lab ID: 1087089)
 - Aluminum, Dissolved
 - Antimony, Dissolved
 - Arsenic, Dissolved
 - Barium, Dissolved
 - Beryllium, Dissolved
 - Cadmium, Dissolved
 - Chromium, Dissolved
 - Cobalt, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved
 - Lead, Dissolved
 - Manganese, Dissolved
 - Molybdenum, Dissolved
 - Nickel, Dissolved
 - Selenium, Dissolved
 - Silver, Dissolved
 - Thallium, Dissolved
 - Vanadium, Dissolved
 - Zinc, Dissolved
- MSD (Lab ID: 1087088)
 - Aluminum, Dissolved
 - Antimony, Dissolved
 - Arsenic, Dissolved
 - Barium, Dissolved
 - Beryllium, Dissolved
 - Cadmium, Dissolved
 - Chromium, Dissolved
 - Cobalt, Dissolved
 - Copper, Dissolved
 - Iron, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 200.8**

Description: 200.8 Potentially Diss. Metals

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

QC Batch: MPRP/20184

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713021,60131713026

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Lead, Dissolved
- Manganese, Dissolved
- Molybdenum, Dissolved
- Nickel, Dissolved
- Selenium, Dissolved
- Silver, Dissolved
- Thallium, Dissolved
- Vanadium, Dissolved
- Zinc, Dissolved

Additional Comments:

Analyte Comments:

QC Batch: MPRP/20183

B: Analyte was detected in the associated method blank.

- DR-1_20121017 (Lab ID: 60131713001)
 - Zinc, Dissolved
- FB_20121017 (Lab ID: 60131713011)
 - Barium, Dissolved
 - Manganese, Dissolved
 - Zinc, Dissolved

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- EB-2_20121017 (Lab ID: 60131713019)
 - Silver, Dissolved
 - Antimony, Dissolved
 - Selenium, Dissolved
 - Vanadium, Dissolved
- GW-3_20121017 (Lab ID: 60131713013)
 - Beryllium, Dissolved

QC Batch: MPRP/20184

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- BAH-01_20121017 (Lab ID: 60131713030)
 - Vanadium, Dissolved
- MW-3 DEEP_20121017 (Lab ID: 60131713023)
 - Nickel, Dissolved
- MW-4 DEEP_20121017 (Lab ID: 60131713025)
 - Nickel, Dissolved

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: BP Anderson Engineering Company Inc.
Date: December 05, 2012

General Information:

1 sample was analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/36091

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10210011003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1321958)
 - Silica
- MSD (Lab ID: 1321959)
 - Silica

Additional Comments:

Analyte Comments:

QC Batch: MPRP/36091

P8: Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

- BLANK (Lab ID: 1321956)
 - Lead

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: EPA 245.1

Description: 245.1 Mercury

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 245.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MERP/7700

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713002,60131713020

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1319693)
- Mercury

QC Batch: MERP/7727

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131713023,60131713030

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1323188)
- Mercury

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 245.1**

Description: 245.1 Mercury, Dissolved

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 245.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.

- BAH-01_20121017 (Lab ID: 60131713030)

H2: Extraction or preparation was conducted outside of the recognized method holding time.

- BAH-01_20121017 (Lab ID: 60131713030)

Sample Preparation:

The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 245.1**

Description: 245.1 Potentially Diss Mercury

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 245.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 245.1 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: EPA 7471
Description: 7471 Mercury
Client: BP Anderson Engineering Company Inc.
Date: December 05, 2012

General Information:

1 sample was analyzed for EPA 7471. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7471 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **SM 2510B**

Description: 2510B Specific Conductance

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for SM 2510B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: Calculated

Description: Salinity

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for Calculated. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **SM 2320B**

Description: 2320B Alkalinity

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **SM 2540C**

Description: 2540C Total Dissolved Solids

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: WET/37912

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1087569)
- Total Dissolved Solids

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **SM 2540D**

Description: 2540D Total Suspended Solids

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for SM 2540D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **SM 4500-S-2 D**

Description: 4500S2D Sulfide, Total

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for SM 4500-S-2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/37926

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60131941002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1087803)
- Sulfide, Total

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **EPA 300.0**

Description: 300.0 IC Anions 28 Days

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂/NO₃ pres.

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: **SM 4500-CN-E**

Description: 4500CNE Cyanide, Total

Client: BP Anderson Engineering Company Inc.

Date: December 05, 2012

General Information:

30 samples were analyzed for SM 4500-CN-E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Method: SM 5310C
Description: 5310C TOC
Client: BP Anderson Engineering Company Inc.
Date: December 05, 2012

General Information:

30 samples were analyzed for SM 5310C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-1_20121017	Lab ID: 60131713001	Collected: 10/17/12 16:01	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	44500 ug/L		100	1	10/26/12 17:00	10/31/12 13:12	7440-70-2	
Magnesium, Dissolved	6350 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:12	7439-95-4	
Potassium, Dissolved	705 ug/L		500	1	10/26/12 17:00	10/31/12 13:12	7440-09-7	
Sodium, Dissolved	2780 ug/L		500	1	10/26/12 17:00	10/31/12 13:12	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	12.0 ug/L		4.0	1	10/26/12 09:04	11/01/12 19:11	7429-90-5	B
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-38-2	
Barium	74.9 ug/L		0.30	1	10/26/12 09:04	11/01/12 19:11	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 19:11	7440-41-7	
Cadmium	ND ug/L		0.080	1	10/26/12 09:04	11/01/12 19:11	7440-43-9	
Calcium	50300 ug/L		100	5	10/26/12 09:04	11/01/12 19:16	7440-70-2	M1
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-47-3	
Cobalt	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-48-4	
Copper	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-50-8	
Iron	ND ug/L		50.0	1	10/26/12 09:04	11/01/12 19:11	7439-89-6	
Lead	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:11	7439-92-1	
Magnesium	6870 ug/L		5.0	1	10/26/12 09:04	11/01/12 19:11	7439-95-4	
Manganese	18.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7439-96-5	
Molybdenum	0.94 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7439-98-7	
Nickel	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-02-0	
Potassium	738 ug/L		20.0	1	10/26/12 09:04	11/01/12 19:11	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7782-49-2	
Silica	6180 ug/L		268	5	10/26/12 09:04	11/01/12 19:16	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:11	7440-22-4	
Sodium	2730 ug/L		50.0	1	10/26/12 09:04	11/01/12 19:11	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:11	7440-28-0	
Total Hardness by 2340B	154000 ug/L		355	5	10/26/12 09:04	11/01/12 19:16		
Vanadium	0.13 ug/L		0.10	1	10/26/12 09:04	11/01/12 19:11	7440-62-2	
Zinc	ND ug/L		5.0	1	10/26/12 09:04	11/01/12 19:11	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	ND ug/L		4.0	1	10/26/12 09:01	11/04/12 00:56	7429-90-5	
Antimony, Dissolved	2.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-38-2	
Barium, Dissolved	74.9 ug/L		0.30	1	10/26/12 09:01	11/04/12 00:56	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 00:56	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.080	1	10/26/12 09:01	11/04/12 00:56	7440-43-9	
Calcium, Dissolved	50200 ug/L		100	5	10/26/12 09:01	11/04/12 01:11	7440-70-2	M1
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-48-4	
Copper, Dissolved	0.94 ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 00:56	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 00:56	7439-92-1	B
Magnesium, Dissolved	6970 ug/L		5.0	1	10/26/12 09:01	11/04/12 00:56	7439-95-4	

Date: 12/05/2012 04:36 PM

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-1_20121017	Lab ID: 60131713001	Collected: 10/17/12 16:01	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	16.8 ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7439-96-5	
Molybdenum, Dissolved	0.91 ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7439-98-7	
Nickel, Dissolved	2.2 ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-02-0	
Potassium, Dissolved	726 ug/L		20.0	1	10/26/12 09:01	11/04/12 00:56	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 00:56	7440-22-4	
Sodium, Dissolved	2760 ug/L		50.0	1	10/26/12 09:01	11/04/12 00:56	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 00:56	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 00:56	7440-62-2	
Zinc, Dissolved	ND ug/L		5.0	1	10/26/12 09:01	11/04/12 00:56	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.9J ug/L		50.0	1	10/26/12 08:30	11/05/12 13:39	7429-90-5	
Antimony, Dissolved	0.078J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-36-0	
Arsenic, Dissolved	0.27J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-38-2	
Barium, Dissolved	72.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/05/12 13:39	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 18:13	7440-43-9	
Chromium, Dissolved	0.68J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-47-3	
Cobalt, Dissolved	0.050J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-48-4	
Copper, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-50-8	
Iron, Dissolved	51.3 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:13	7439-89-6	
Lead, Dissolved	0.25J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7439-92-1	
Manganese, Dissolved	17.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7439-96-5	
Molybdenum, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7782-49-2	
Silver, Dissolved	0.074J ug/L		0.50	1	10/26/12 08:30	10/31/12 18:13	7440-22-4	
Thallium, Dissolved	0.048J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:13	7440-62-2	
Zinc, Dissolved	7.4J ug/L		10.0	1	10/26/12 08:30	10/31/12 18:13	7440-66-6	B
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:29	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:20	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 14:55	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	316 umhos/cm		10.0	1			10/29/12 15:45	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	202 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: DR-1_20121017	Lab ID: 60131713001	Collected: 10/17/12 16:01	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.15	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	95.3	mg/L	20.0	1		10/24/12 12:57		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/24/12 12:57		
Alkalinity, Total as CaCO3	95.3	mg/L	20.0	1		10/24/12 12:57		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	179	mg/L	5.0	1		10/24/12 15:30		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/24/12 11:24		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:53	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.4	mg/L	1.0	1		10/28/12 13:28	16887-00-6	
Sulfate	56.2	mg/L	5.0	5		10/28/12 13:44	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:34		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 14:51	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 14:21	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-2_20121017	Lab ID: 60131713002	Collected: 10/18/12 12:38	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	60500 ug/L		100	1	10/26/12 17:00	10/31/12 13:25	7440-70-2	
Magnesium, Dissolved	7740 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:25	7439-95-4	
Potassium, Dissolved	957 ug/L		500	1	10/26/12 17:00	10/31/12 13:25	7440-09-7	
Sodium, Dissolved	3360 ug/L		500	1	10/26/12 17:00	10/31/12 13:25	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	12.3 ug/L		4.0	1	10/26/12 09:04	11/01/12 19:31	7429-90-5	B
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-38-2	
Barium	70.8 ug/L		0.30	1	10/26/12 09:04	11/01/12 19:31	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 19:31	7440-41-7	
Cadmium	0.083 ug/L		0.080	1	10/26/12 09:04	11/01/12 19:31	7440-43-9	
Calcium	72500 ug/L		100	5	10/26/12 09:04	11/01/12 19:35	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-47-3	
Cobalt	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-48-4	
Copper	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-50-8	
Iron	81.3 ug/L		50.0	1	10/26/12 09:04	11/01/12 19:31	7439-89-6	
Lead	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:31	7439-92-1	
Magnesium	8700 ug/L		5.0	1	10/26/12 09:04	11/01/12 19:31	7439-95-4	
Manganese	279 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7439-96-5	
Molybdenum	1.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7439-98-7	
Nickel	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-02-0	
Potassium	1100 ug/L		20.0	1	10/26/12 09:04	11/01/12 19:31	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7782-49-2	
Silica	7980 ug/L		268	5	10/26/12 09:04	11/01/12 19:35	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:31	7440-22-4	
Sodium	3340 ug/L		50.0	1	10/26/12 09:04	11/01/12 19:31	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:31	7440-28-0	
Total Hardness by 2340B	217000 ug/L		355	5	10/26/12 09:04	11/01/12 19:35		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:31	7440-62-2	
Zinc	10.2 ug/L		5.0	1	10/26/12 09:04	11/01/12 19:31	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	4.7 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:43	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-38-2	
Barium, Dissolved	71.7 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:43	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:43	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.080	1	10/26/12 09:01	11/04/12 01:43	7440-43-9	
Calcium, Dissolved	72700 ug/L		100	5	10/26/12 09:01	11/04/12 01:47	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-48-4	
Copper, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 01:43	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:43	7439-92-1	B
Magnesium, Dissolved	8790 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:43	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-2_20121017	Lab ID: 60131713002	Collected: 10/18/12 12:38	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	264 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7439-96-5	
Molybdenum, Dissolved	1.3 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7439-98-7	
Nickel, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-02-0	
Potassium, Dissolved	969 ug/L		20.0	1	10/26/12 09:01	11/04/12 01:43	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:43	7440-22-4	
Sodium, Dissolved	3360 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:43	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:43	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:43	7440-62-2	
Zinc, Dissolved	10.1 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:43	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	9.7J ug/L		50.0	1	10/26/12 08:30	11/05/12 13:43	7429-90-5	
Antimony, Dissolved	0.074J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-36-0	
Arsenic, Dissolved	0.31J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-38-2	
Barium, Dissolved	74.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/05/12 13:43	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 18:17	7440-43-9	
Chromium, Dissolved	0.80J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-47-3	
Cobalt, Dissolved	0.10J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-48-4	
Copper, Dissolved	1.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-50-8	
Iron, Dissolved	84.8 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:17	7439-89-6	
Lead, Dissolved	0.72J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7439-92-1	
Manganese, Dissolved	291 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7439-96-5	M1
Molybdenum, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7439-98-7	
Nickel, Dissolved	0.37J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-02-0	
Selenium, Dissolved	0.38J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 18:17	7440-22-4	
Thallium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:17	7440-62-2	
Zinc, Dissolved	23.0 ug/L		10.0	1	10/26/12 08:30	10/31/12 18:17	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:31	7439-97-6	M1
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:23	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 14:58	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	416 umhos/cm		10.0	1			10/29/12 15:47	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	266 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-2_20121017	Lab ID: 60131713002	Collected: 10/18/12 12:38	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.20	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	105	mg/L	20.0	1		10/24/12 13:02		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/24/12 13:02		
Alkalinity, Total as CaCO3	105	mg/L	20.0	1		10/24/12 13:02		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	261	mg/L	5.0	1		10/24/12 15:36		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/25/12 10:28		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:42 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.4	mg/L	1.0	1		10/28/12 15:04 16887-00-6		
Sulfate	97.2	mg/L	10.0	10		10/29/12 12:59 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:36		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 14:54 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 14:49 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-3_20121017	Lab ID: 60131713003	Collected: 10/17/12 15:30	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	190000 ug/L		100	1	10/26/12 17:00	10/31/12 13:29	7440-70-2	
Magnesium, Dissolved	16800 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:29	7439-95-4	
Potassium, Dissolved	67000 ug/L		500	1	10/26/12 17:00	10/31/12 13:29	7440-09-7	
Sodium, Dissolved	10500 ug/L		500	1	10/26/12 17:00	10/31/12 13:29	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	230 ug/L		4.0	1	10/26/12 09:04	11/01/12 19:40	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-38-2	
Barium	19.2 ug/L		0.30	1	10/26/12 09:04	11/01/12 19:40	7440-39-3	
Beryllium	0.53 ug/L		0.20	1	10/26/12 09:04	11/01/12 19:40	7440-41-7	
Cadmium	15.3 ug/L		0.080	1	10/26/12 09:04	11/01/12 19:40	7440-43-9	
Calcium	224000 ug/L		400	20	10/26/12 09:04	11/01/12 19:44	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-47-3	
Cobalt	2.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-48-4	
Copper	41.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-50-8	
Iron	4390 ug/L		50.0	1	10/26/12 09:04	11/01/12 19:40	7439-89-6	
Lead	1.9 ug/L		0.10	1	10/26/12 09:04	11/01/12 19:40	7439-92-1	
Magnesium	19000 ug/L		5.0	1	10/26/12 09:04	11/01/12 19:40	7439-95-4	
Manganese	1790 ug/L		10.0	20	10/26/12 09:04	11/01/12 19:44	7439-96-5	
Molybdenum	17.1 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7439-98-7	
Nickel	3.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-02-0	
Potassium	75400 ug/L		400	20	10/26/12 09:04	11/01/12 19:44	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7782-49-2	
Silica	16400 ug/L		1070	20	10/26/12 09:04	11/01/12 19:44	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 19:40	7440-22-4	
Sodium	11000 ug/L		50.0	1	10/26/12 09:04	11/01/12 19:40	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:40	7440-28-0	
Total Hardness by 2340B	637000 ug/L		1420	20	10/26/12 09:04	11/01/12 19:44		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 19:40	7440-62-2	
Zinc	3030 ug/L		100	20	10/26/12 09:04	11/01/12 19:44	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	49.3 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:51	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-38-2	
Barium, Dissolved	18.7 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:51	7440-39-3	
Beryllium, Dissolved	0.26 ug/L		0.20	1	10/26/12 09:01	11/04/12 01:51	7440-41-7	
Cadmium, Dissolved	14.3 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:51	7440-43-9	
Calcium, Dissolved	218000 ug/L		400	20	10/26/12 09:01	11/04/12 01:55	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-47-3	
Cobalt, Dissolved	2.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-48-4	
Copper, Dissolved	11.3 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-50-8	
Iron, Dissolved	1470 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:51	7439-89-6	
Lead, Dissolved	0.44 ug/L		0.10	1	10/26/12 09:01	11/04/12 01:51	7439-92-1	
Magnesium, Dissolved	18600 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:51	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-3_20121017	Lab ID: 60131713003	Collected: 10/17/12 15:30	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1690 ug/L		10.0	20	10/26/12 09:01	11/04/12 01:55	7439-96-5	
Molybdenum, Dissolved	16.2 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7439-98-7	
Nickel, Dissolved	6.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-02-0	
Potassium, Dissolved	73800 ug/L		400	20	10/26/12 09:01	11/04/12 01:55	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:51	7440-22-4	
Sodium, Dissolved	10800 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:51	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:51	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:51	7440-62-2	
Zinc, Dissolved	2820 ug/L		100	20	10/26/12 09:01	11/04/12 01:55	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	211 ug/L		50.0	1	10/26/12 08:30	11/05/12 13:59	7429-90-5	
Antimony, Dissolved	0.27J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-36-0	
Arsenic, Dissolved	0.37J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-38-2	
Barium, Dissolved	18.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-39-3	
Beryllium, Dissolved	0.50 ug/L		0.50	1	10/26/12 08:30	11/05/12 13:59	7440-41-7	
Cadmium, Dissolved	14.0 ug/L		0.50	1	10/26/12 08:30	10/31/12 18:34	7440-43-9	
Chromium, Dissolved	0.61J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-47-3	
Cobalt, Dissolved	2.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-48-4	
Copper, Dissolved	36.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-50-8	
Iron, Dissolved	4010 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:34	7439-89-6	
Lead, Dissolved	3.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7439-92-1	
Manganese, Dissolved	1640 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7439-96-5	
Molybdenum, Dissolved	17.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7439-98-7	
Nickel, Dissolved	2.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7782-49-2	
Silver, Dissolved	0.10J ug/L		0.50	1	10/26/12 08:30	10/31/12 18:34	7440-22-4	
Thallium, Dissolved	0.12J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:34	7440-62-2	
Zinc, Dissolved	2420 ug/L		10.0	1	10/26/12 08:30	10/31/12 18:34	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:37	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:30	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:00	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1390 umhos/cm		10.0	1			10/29/12 15:51	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	888 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-3_20121017	Lab ID: 60131713003	Collected: 10/17/12 15:30	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.69	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO ₃)	112	mg/L	20.0	1		10/24/12 13:06		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		10/24/12 13:06		
Alkalinity, Total as CaCO ₃	112	mg/L	20.0	1		10/24/12 13:06		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1080	mg/L	5.0	1		10/24/12 15:31		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/24/12 11:24		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:53 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	9.3	mg/L	1.0	1		10/28/12 16:39 16887-00-6		
Sulfate	629	mg/L	50.0	50		10/28/12 16:55 14808-79-8		
353.2 Nitrogen, NO₂/NO₃ pres.	Analytical Method: EPA 353.2							
Nitrogen, NO ₂ plus NO ₃	ND	mg/L	0.10	1		11/01/12 13:38		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 14:55 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 15:18 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-4_20121017	Lab ID: 60131713004	Collected: 10/17/12 12:29	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	213000 ug/L		100	1	10/26/12 17:00	10/31/12 13:32	7440-70-2	
Magnesium, Dissolved	20200 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:32	7439-95-4	
Potassium, Dissolved	48800 ug/L		500	1	10/26/12 17:00	10/31/12 13:32	7440-09-7	
Sodium, Dissolved	11000 ug/L		500	1	10/26/12 17:00	10/31/12 13:32	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	1350 ug/L		4.0	1	10/26/12 09:04	11/01/12 20:00	7429-90-5	
Antimony	0.56 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-36-0	
Arsenic	1.7 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-38-2	
Barium	27.5 ug/L		0.30	1	10/26/12 09:04	11/01/12 20:00	7440-39-3	
Beryllium	1.5 ug/L		0.20	1	10/26/12 09:04	11/01/12 20:00	7440-41-7	
Cadmium	20.8 ug/L		0.080	1	10/26/12 09:04	11/01/12 20:00	7440-43-9	
Calcium	239000 ug/L		400	20	10/26/12 09:04	11/01/12 20:04	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-47-3	
Cobalt	2.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-48-4	
Copper	216 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-50-8	
Iron	13100 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:00	7439-89-6	
Lead	52.8 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:00	7439-92-1	
Magnesium	21700 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:00	7439-95-4	
Manganese	1850 ug/L		10.0	20	10/26/12 09:04	11/01/12 20:04	7439-96-5	
Molybdenum	15.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7439-98-7	
Nickel	4.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-02-0	
Potassium	53100 ug/L		400	20	10/26/12 09:04	11/01/12 20:04	7440-09-7	
Selenium	0.72 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7782-49-2	
Silica	18900 ug/L		1070	20	10/26/12 09:04	11/01/12 20:04	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:00	7440-22-4	
Sodium	10900 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:00	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:00	7440-28-0	
Total Hardness by 2340B	686000 ug/L		1420	20	10/26/12 09:04	11/01/12 20:04		
Vanadium	0.68 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:00	7440-62-2	
Zinc	4030 ug/L		100	20	10/26/12 09:04	11/01/12 20:04	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.1 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:59	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-38-2	
Barium, Dissolved	22.1 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:59	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:59	7440-41-7	
Cadmium, Dissolved	8.9 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:59	7440-43-9	
Calcium, Dissolved	250000 ug/L		400	20	10/26/12 09:01	11/04/12 01:03	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-47-3	
Cobalt, Dissolved	2.0 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-48-4	
Copper, Dissolved	2.2 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 01:59	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:59	7439-92-1	B
Magnesium, Dissolved	21400 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:59	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-4_20121017	Lab ID: 60131713004	Collected: 10/17/12 12:29	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1420 ug/L		10.0	20	10/26/12 09:01	11/04/12 01:03	7439-96-5	
Molybdenum, Dissolved	16.5 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7439-98-7	
Nickel, Dissolved	5.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-02-0	
Potassium, Dissolved	56000 ug/L		400	20	10/26/12 09:01	11/04/12 01:03	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:59	7440-22-4	
Sodium, Dissolved	10800 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:59	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:59	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:59	7440-62-2	
Zinc, Dissolved	1650 ug/L		100	20	10/26/12 09:01	11/04/12 01:03	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	1120 ug/L		50.0	1	10/26/12 08:30	11/05/12 14:03	7429-90-5	
Antimony, Dissolved	0.50J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-36-0	
Arsenic, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-38-2	
Barium, Dissolved	24.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-39-3	
Beryllium, Dissolved	1.2 ug/L		0.50	1	10/26/12 08:30	11/05/12 14:03	7440-41-7	
Cadmium, Dissolved	19.3 ug/L		0.50	1	10/26/12 08:30	10/31/12 18:38	7440-43-9	
Chromium, Dissolved	1.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-47-3	
Cobalt, Dissolved	2.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-48-4	
Copper, Dissolved	189 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-50-8	
Iron, Dissolved	11900 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:38	7439-89-6	
Lead, Dissolved	50.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7439-92-1	
Manganese, Dissolved	1550 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7439-96-5	
Molybdenum, Dissolved	7.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7439-98-7	
Nickel, Dissolved	3.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-02-0	
Selenium, Dissolved	0.46J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7782-49-2	
Silver, Dissolved	0.42J ug/L		0.50	1	10/26/12 08:30	10/31/12 18:38	7440-22-4	
Thallium, Dissolved	0.027J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-28-0	
Vanadium, Dissolved	0.31J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:38	7440-62-2	
Zinc, Dissolved	3360 ug/L		10.0	1	10/26/12 08:30	10/31/12 18:38	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:48	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:33	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:02	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1330 umhos/cm		10.0	1			10/29/12 15:53	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	853 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-4_20121017	Lab ID: 60131713004	Collected: 10/17/12 12:29	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.66	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	104	mg/L	20.0	1		10/24/12 13:10		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/24/12 13:10		
Alkalinity, Total as CaCO3	104	mg/L	20.0	1		10/24/12 13:10		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1080	mg/L	5.0	1		10/24/12 15:31		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	58.0	mg/L	5.0	1		10/24/12 11:25		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:54 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.7	mg/L	1.0	1		10/28/12 17:11 16887-00-6		
Sulfate	667	mg/L	50.0	50		10/28/12 17:27 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:38		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 14:59 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 16:00 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-5_20121017	Lab ID: 60131713005	Collected: 10/18/12 12:46	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	221000 ug/L		100	1	10/26/12 17:00	10/31/12 13:36	7440-70-2	
Magnesium, Dissolved	20700 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:36	7439-95-4	
Potassium, Dissolved	50100 ug/L		500	1	10/26/12 17:00	10/31/12 13:36	7440-09-7	
Sodium, Dissolved	11200 ug/L		500	1	10/26/12 17:00	10/31/12 13:36	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	91.3 ug/L		4.0	1	10/26/12 09:04	11/01/12 20:09	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-38-2	
Barium	20.3 ug/L		0.30	1	10/26/12 09:04	11/01/12 20:09	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 20:09	7440-41-7	
Cadmium	10.5 ug/L		0.080	1	10/26/12 09:04	11/01/12 20:09	7440-43-9	
Calcium	242000 ug/L		400	20	10/26/12 09:04	11/01/12 20:13	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-47-3	
Cobalt	1.7 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-48-4	
Copper	15.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-50-8	
Iron	1310 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:09	7439-89-6	
Lead	2.3 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:09	7439-92-1	
Magnesium	21900 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:09	7439-95-4	
Manganese	1400 ug/L		10.0	20	10/26/12 09:04	11/01/12 20:13	7439-96-5	
Molybdenum	14.7 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7439-98-7	
Nickel	3.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-02-0	
Potassium	54400 ug/L		400	20	10/26/12 09:04	11/01/12 20:13	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7782-49-2	
Silica	15900 ug/L		1070	20	10/26/12 09:04	11/01/12 20:13	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:09	7440-22-4	
Sodium	11600 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:09	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:09	7440-28-0	
Total Hardness by 2340B	695000 ug/L		1420	20	10/26/12 09:04	11/01/12 20:13		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:09	7440-62-2	
Zinc	2000 ug/L		100	20	10/26/12 09:04	11/01/12 20:13	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	14.0 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:08	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-38-2	
Barium, Dissolved	20.6 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:08	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:08	7440-41-7	
Cadmium, Dissolved	9.2 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:08	7440-43-9	
Calcium, Dissolved	254000 ug/L		400	20	10/26/12 09:01	11/04/12 01:12	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-47-3	
Cobalt, Dissolved	1.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-48-4	
Copper, Dissolved	2.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-50-8	
Iron, Dissolved	113 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:08	7439-89-6	
Lead, Dissolved	0.24 ug/L		0.10	1	10/26/12 09:01	11/04/12 01:08	7439-92-1	
Magnesium, Dissolved	21900 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:08	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-5_20121017	Lab ID: 60131713005	Collected: 10/18/12 12:46	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1380 ug/L		10.0	20	10/26/12 09:01	11/04/12 01:12	7439-96-5	
Molybdenum, Dissolved	15.0 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7439-98-7	
Nickel, Dissolved	5.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-02-0	
Potassium, Dissolved	57200 ug/L		400	20	10/26/12 09:01	11/04/12 01:12	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:08	7440-22-4	
Sodium, Dissolved	11700 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:08	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:08	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:08	7440-62-2	
Zinc, Dissolved	1860 ug/L		100	20	10/26/12 09:01	11/04/12 01:12	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	60.0 ug/L		50.0	1	10/26/12 08:30	11/05/12 14:07	7429-90-5	
Antimony, Dissolved	0.18J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-36-0	
Arsenic, Dissolved	0.34J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-38-2	
Barium, Dissolved	18.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-39-3	
Beryllium, Dissolved	0.18J ug/L		0.50	1	10/26/12 08:30	11/05/12 14:07	7440-41-7	
Cadmium, Dissolved	9.2 ug/L		0.50	1	10/26/12 08:30	10/31/12 18:42	7440-43-9	
Chromium, Dissolved	0.69J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-47-3	
Cobalt, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-48-4	
Copper, Dissolved	12.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-50-8	
Iron, Dissolved	1160 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:42	7439-89-6	
Lead, Dissolved	2.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7439-92-1	
Manganese, Dissolved	1260 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7439-96-5	
Molybdenum, Dissolved	14.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7439-98-7	
Nickel, Dissolved	2.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-02-0	
Selenium, Dissolved	0.36J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 18:42	7440-22-4	
Thallium, Dissolved	0.067J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:42	7440-62-2	
Zinc, Dissolved	1560 ug/L		10.0	1	10/26/12 08:30	10/31/12 18:42	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:50	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:40	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:09	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1360 umhos/cm		10.0	1			10/29/12 15:57	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	870 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-5_20121017	Lab ID: 60131713005	Collected: 10/18/12 12:46	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.68	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO ₃)	130	mg/L	20.0	1		10/24/12 13:15		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		10/24/12 13:15		
Alkalinity, Total as CaCO ₃	130	mg/L	20.0	1		10/24/12 13:15		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1100	mg/L	5.0	1		10/24/12 15:37		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	5.0	mg/L	5.0	1		10/25/12 10:29		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:42 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.8	mg/L	1.0	1		10/28/12 18:14 16887-00-6		
Sulfate	658	mg/L	50.0	50		10/28/12 18:30 14808-79-8		
353.2 Nitrogen, NO₂/NO₃ pres.	Analytical Method: EPA 353.2							
Nitrogen, NO ₂ plus NO ₃	ND	mg/L	0.10	1		11/01/12 13:41		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 14:59 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 16:14 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-6_20121017	Lab ID: 60131713006	Collected: 10/18/12 12:17	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	257000 ug/L		100	1	10/26/12 17:00	10/31/12 13:46	7440-70-2	
Magnesium, Dissolved	27600 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:46	7439-95-4	
Potassium, Dissolved	41300 ug/L		500	1	10/26/12 17:00	10/31/12 13:46	7440-09-7	
Sodium, Dissolved	16600 ug/L		500	1	10/26/12 17:00	10/31/12 13:46	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	38.0 ug/L		4.0	1	10/26/12 09:04	11/01/12 20:18	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-38-2	
Barium	21.9 ug/L		0.30	1	10/26/12 09:04	11/01/12 20:18	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 20:18	7440-41-7	
Cadmium	8.0 ug/L		0.080	1	10/26/12 09:04	11/01/12 20:18	7440-43-9	
Calcium	270000 ug/L		400	20	10/26/12 09:04	11/01/12 20:22	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-47-3	
Cobalt	1.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-48-4	
Copper	5.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-50-8	
Iron	644 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:18	7439-89-6	
Lead	1.7 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:18	7439-92-1	
Magnesium	28300 ug/L		100	20	10/26/12 09:04	11/01/12 20:22	7439-95-4	
Manganese	1380 ug/L		10.0	20	10/26/12 09:04	11/01/12 20:22	7439-96-5	
Molybdenum	13.3 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7439-98-7	
Nickel	3.0 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-02-0	
Potassium	42700 ug/L		400	20	10/26/12 09:04	11/01/12 20:22	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7782-49-2	
Silica	21000 ug/L		1070	20	10/26/12 09:04	11/01/12 20:22	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:18	7440-22-4	
Sodium	16200 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:18	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:18	7440-28-0	
Total Hardness by 2340B	791000 ug/L		1420	20	10/26/12 09:04	11/01/12 20:22		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:18	7440-62-2	
Zinc	1780 ug/L		100	20	10/26/12 09:04	11/01/12 20:22	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	ND ug/L		4.0	1	10/26/12 09:01	11/04/12 01:16	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-38-2	
Barium, Dissolved	21.3 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:16	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:16	7440-41-7	
Cadmium, Dissolved	7.3 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:16	7440-43-9	
Calcium, Dissolved	285000 ug/L		400	20	10/26/12 09:01	11/04/12 01:20	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-47-3	
Cobalt, Dissolved	1.3 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-48-4	
Copper, Dissolved	0.72 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-50-8	
Iron, Dissolved	59.2 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:16	7439-89-6	
Lead, Dissolved	0.24 ug/L		0.10	1	10/26/12 09:01	11/04/12 01:16	7439-92-1	
Magnesium, Dissolved	30100 ug/L		100	20	10/26/12 09:01	11/04/12 01:20	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-6_20121017	Lab ID: 60131713006	Collected: 10/18/12 12:17	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1380 ug/L		10.0	20	10/26/12 09:01	11/04/12 01:20	7439-96-5	
Molybdenum, Dissolved	13.2 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7439-98-7	
Nickel, Dissolved	3.1 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-02-0	
Potassium, Dissolved	44400 ug/L		400	20	10/26/12 09:01	11/04/12 01:20	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:16	7440-22-4	
Sodium, Dissolved	15900 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:16	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:16	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:16	7440-62-2	
Zinc, Dissolved	1760 ug/L		100	20	10/26/12 09:01	11/04/12 01:20	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	24.3J ug/L		50.0	1	10/26/12 08:30	11/05/12 14:20	7429-90-5	
Antimony, Dissolved	0.18J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-36-0	
Arsenic, Dissolved	0.40J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-38-2	
Barium, Dissolved	20.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-39-3	
Beryllium, Dissolved	0.088J ug/L		0.50	1	10/26/12 08:30	11/05/12 14:20	7440-41-7	
Cadmium, Dissolved	7.4 ug/L		0.50	1	10/26/12 08:30	10/31/12 18:55	7440-43-9	
Chromium, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-47-3	
Cobalt, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-48-4	
Copper, Dissolved	4.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-50-8	
Iron, Dissolved	572 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:55	7439-89-6	
Lead, Dissolved	1.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7439-92-1	
Manganese, Dissolved	1230 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7439-96-5	
Molybdenum, Dissolved	13.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7439-98-7	
Nickel, Dissolved	1.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-02-0	
Selenium, Dissolved	0.36J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 18:55	7440-22-4	
Thallium, Dissolved	0.074J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:55	7440-62-2	
Zinc, Dissolved	1370 ug/L		10.0	1	10/26/12 08:30	10/31/12 18:55	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:52	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:43	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:11	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1470 umhos/cm		10.0	1			10/29/12 16:03	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	939 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: DR-6_20121017	Lab ID: 60131713006	Collected: 10/18/12 12:17	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.73	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	171	mg/L	20.0	1		10/24/12 13:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/24/12 13:19		
Alkalinity, Total as CaCO3	171	mg/L	20.0	1		10/24/12 13:19		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1180	mg/L	5.0	1		10/24/12 15:37		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/25/12 10:29		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:43 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.8	mg/L	1.0	1		10/28/12 18:46 16887-00-6		
Sulfate	690	mg/L	50.0	50		10/28/12 19:02 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:42		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:00 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 16:28 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-7_20121017	Lab ID: 60131713007	Collected: 10/18/12 12:56	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	99000 ug/L		100	1	10/26/12 17:00	10/31/12 13:50	7440-70-2	
Magnesium, Dissolved	13000 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:50	7439-95-4	
Potassium, Dissolved	4930 ug/L		500	1	10/26/12 17:00	10/31/12 13:50	7440-09-7	
Sodium, Dissolved	6770 ug/L		500	1	10/26/12 17:00	10/31/12 13:50	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	13.0 ug/L		4.0	1	10/26/12 09:04	11/01/12 20:27	7429-90-5	B
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-36-0	
Arsenic	0.85 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-38-2	
Barium	67.7 ug/L		0.30	1	10/26/12 09:04	11/01/12 20:27	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 20:27	7440-41-7	
Cadmium	0.70 ug/L		0.080	1	10/26/12 09:04	11/01/12 20:27	7440-43-9	
Calcium	106000 ug/L		100	5	10/26/12 09:04	11/01/12 20:31	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-47-3	
Cobalt	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-48-4	
Copper	0.60 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-50-8	
Iron	230 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:27	7439-89-6	
Lead	0.18 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:27	7439-92-1	
Magnesium	13500 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:27	7439-95-4	
Manganese	400 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7439-96-5	
Molybdenum	2.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7439-98-7	
Nickel	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-02-0	
Potassium	5060 ug/L		20.0	1	10/26/12 09:04	11/01/12 20:27	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7782-49-2	
Silica	12800 ug/L		268	5	10/26/12 09:04	11/01/12 20:31	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:27	7440-22-4	
Sodium	6900 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:27	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:27	7440-28-0	
Total Hardness by 2340B	320000 ug/L		355	5	10/26/12 09:04	11/01/12 20:31		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:27	7440-62-2	
Zinc	135 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:27	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	7.5 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:39	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-36-0	
Arsenic, Dissolved	1.0 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-38-2	
Barium, Dissolved	67.3 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:39	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:39	7440-41-7	
Cadmium, Dissolved	0.63 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:39	7440-43-9	
Calcium, Dissolved	104000 ug/L		100	5	10/26/12 09:01	11/04/12 01:43	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-48-4	
Copper, Dissolved	1.0 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-50-8	
Iron, Dissolved	171 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:39	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:39	7439-92-1	B
Magnesium, Dissolved	13200 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:39	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-7_20121017	Lab ID: 60131713007	Collected: 10/18/12 12:56	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	378 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7439-96-5	
Molybdenum, Dissolved	2.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7439-98-7	
Nickel, Dissolved	1.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-02-0	
Potassium, Dissolved	4960 ug/L		20.0	1	10/26/12 09:01	11/04/12 01:39	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:39	7440-22-4	
Sodium, Dissolved	6760 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:39	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:39	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:39	7440-62-2	
Zinc, Dissolved	132 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:39	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.1J ug/L		50.0	1	10/26/12 08:30	11/05/12 14:24	7429-90-5	
Antimony, Dissolved	0.075J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-36-0	
Arsenic, Dissolved	0.88J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-38-2	
Barium, Dissolved	60.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-39-3	
Beryllium, Dissolved	0.084J ug/L		0.50	1	10/26/12 08:30	11/05/12 14:24	7440-41-7	
Cadmium, Dissolved	0.54 ug/L		0.50	1	10/26/12 08:30	10/31/12 18:59	7440-43-9	
Chromium, Dissolved	0.49J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-47-3	
Cobalt, Dissolved	0.22J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-48-4	
Copper, Dissolved	0.61J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-50-8	
Iron, Dissolved	202 ug/L		50.0	1	10/26/12 08:30	10/31/12 18:59	7439-89-6	
Lead, Dissolved	0.24J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7439-92-1	
Manganese, Dissolved	347 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7439-96-5	
Molybdenum, Dissolved	2.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 18:59	7440-22-4	
Thallium, Dissolved	0.034J ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 18:59	7440-62-2	
Zinc, Dissolved	114 ug/L		10.0	1	10/26/12 08:30	10/31/12 18:59	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:55	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:45	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:18	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	627 umhos/cm		10.0	1			10/29/12 16:04	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	402 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-7_20121017	Lab ID: 60131713007	Collected: 10/18/12 12:56	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.30	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO ₃)	142	mg/L	20.0	1		10/25/12 09:28		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		10/25/12 09:28		
Alkalinity, Total as CaCO ₃	142	mg/L	20.0	1		10/25/12 09:28		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	418	mg/L	5.0	1		10/24/12 15:37		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/25/12 10:30		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:43 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.5	mg/L	1.0	1		10/28/12 19:18 16887-00-6		
Sulfate	174	mg/L	20.0	20		10/28/12 19:34 14808-79-8		
353.2 Nitrogen, NO₂/NO₃ pres.	Analytical Method: EPA 353.2							
Nitrogen, NO ₂ plus NO ₃	ND	mg/L	0.10	1		11/01/12 13:43		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:00 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 16:43 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-8_20121017	Lab ID: 60131713008	Collected: 10/17/12 15:50	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	207000 ug/L		100	1	10/26/12 17:00	10/31/12 13:53	7440-70-2	
Magnesium, Dissolved	18600 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:53	7439-95-4	
Potassium, Dissolved	61800 ug/L		500	1	10/26/12 17:00	10/31/12 13:53	7440-09-7	
Sodium, Dissolved	10700 ug/L		500	1	10/26/12 17:00	10/31/12 13:53	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	229 ug/L		4.0	1	10/26/12 09:04	11/01/12 20:36	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-38-2	
Barium	19.6 ug/L		0.30	1	10/26/12 09:04	11/01/12 20:36	7440-39-3	
Beryllium	0.48 ug/L		0.20	1	10/26/12 09:04	11/01/12 20:36	7440-41-7	
Cadmium	16.0 ug/L		0.080	1	10/26/12 09:04	11/01/12 20:36	7440-43-9	
Calcium	218000 ug/L		400	20	10/26/12 09:04	11/01/12 20:40	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-47-3	
Cobalt	2.6 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-48-4	
Copper	41.8 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-50-8	
Iron	4450 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:36	7439-89-6	
Lead	1.7 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:36	7439-92-1	
Magnesium	19400 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:36	7439-95-4	
Manganese	1780 ug/L		10.0	20	10/26/12 09:04	11/01/12 20:40	7439-96-5	
Molybdenum	17.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7439-98-7	
Nickel	4.1 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-02-0	
Potassium	65400 ug/L		400	20	10/26/12 09:04	11/01/12 20:40	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7782-49-2	
Silica	15700 ug/L		1070	20	10/26/12 09:04	11/01/12 20:40	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:36	7440-22-4	
Sodium	11100 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:36	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:36	7440-28-0	
Total Hardness by 2340B	624000 ug/L		1420	20	10/26/12 09:04	11/01/12 20:40		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:36	7440-62-2	
Zinc	2990 ug/L		100	20	10/26/12 09:04	11/01/12 20:40	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	25.7 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:47	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-38-2	
Barium, Dissolved	19.0 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:47	7440-39-3	
Beryllium, Dissolved	0.37 ug/L		0.20	1	10/26/12 09:01	11/04/12 01:47	7440-41-7	
Cadmium, Dissolved	14.9 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:47	7440-43-9	
Calcium, Dissolved	231000 ug/L		400	20	10/26/12 09:01	11/04/12 01:51	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-47-3	
Cobalt, Dissolved	2.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-48-4	
Copper, Dissolved	6.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-50-8	
Iron, Dissolved	1190 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:47	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:47	7439-92-1	B
Magnesium, Dissolved	19100 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:47	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-8_20121017	Lab ID: 60131713008	Collected: 10/17/12 15:50	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1780 ug/L		10.0	20	10/26/12 09:01	11/04/12 01:51	7439-96-5	
Molybdenum, Dissolved	16.5 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7439-98-7	
Nickel, Dissolved	6.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-02-0	
Potassium, Dissolved	68300 ug/L		400	20	10/26/12 09:01	11/04/12 01:51	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:47	7440-22-4	
Sodium, Dissolved	10800 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:47	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:47	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:47	7440-62-2	
Zinc, Dissolved	2970 ug/L		100	20	10/26/12 09:01	11/04/12 01:51	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	202 ug/L		50.0	1	10/26/12 08:30	11/05/12 14:28	7429-90-5	
Antimony, Dissolved	0.25J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-36-0	
Arsenic, Dissolved	0.33J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-38-2	
Barium, Dissolved	17.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-39-3	
Beryllium, Dissolved	0.46J ug/L		0.50	1	10/26/12 08:30	11/05/12 14:28	7440-41-7	
Cadmium, Dissolved	13.4 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:03	7440-43-9	
Chromium, Dissolved	0.64J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-47-3	
Cobalt, Dissolved	2.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-48-4	
Copper, Dissolved	33.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-50-8	
Iron, Dissolved	3820 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:03	7439-89-6	
Lead, Dissolved	1.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7439-92-1	
Manganese, Dissolved	1580 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7439-96-5	
Molybdenum, Dissolved	16.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7439-98-7	
Nickel, Dissolved	2.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:03	7440-22-4	
Thallium, Dissolved	0.065J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:03	7440-62-2	
Zinc, Dissolved	2320 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:03	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:57	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:48	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:20	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1300 umhos/cm		10.0	1			10/29/12 16:05	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	833 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-8_20121017	Lab ID: 60131713008	Collected: 10/17/12 15:50	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.65	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	109	mg/L	20.0	1		10/25/12 09:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 09:32		
Alkalinity, Total as CaCO3	109	mg/L	20.0	1		10/25/12 09:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1050	mg/L	5.0	1		10/24/12 15:31		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/24/12 11:25		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:54 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.8	mg/L	1.0	1		10/28/12 19:50 16887-00-6		
Sulfate	630	mg/L	50.0	50		10/28/12 20:06 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:44		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:03 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 16:57 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-4-SW_20121017	Lab ID: 60131713009	Collected: 10/18/12 01:09	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	92500 ug/L		100	1	10/26/12 17:00	10/31/12 13:56	7440-70-2	
Magnesium, Dissolved	11800 ug/L		50.0	1	10/26/12 17:00	10/31/12 13:56	7439-95-4	
Potassium, Dissolved	4320 ug/L		500	1	10/26/12 17:00	10/31/12 13:56	7440-09-7	
Sodium, Dissolved	5620 ug/L		500	1	10/26/12 17:00	10/31/12 13:56	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	19.4 ug/L		4.0	1	10/26/12 09:04	11/01/12 20:56	7429-90-5	B
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-38-2	
Barium	76.6 ug/L		0.30	1	10/26/12 09:04	11/01/12 20:56	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 20:56	7440-41-7	
Cadmium	0.79 ug/L		0.080	1	10/26/12 09:04	11/01/12 20:56	7440-43-9	
Calcium	103000 ug/L		100	5	10/26/12 09:04	11/01/12 21:00	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-47-3	
Cobalt	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-48-4	
Copper	0.87 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-50-8	
Iron	159 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:56	7439-89-6	
Lead	0.43 ug/L		0.10	1	10/26/12 09:04	11/01/12 20:56	7439-92-1	
Magnesium	12700 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:56	7439-95-4	
Manganese	384 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7439-96-5	
Molybdenum	2.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7439-98-7	
Nickel	0.51 ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-02-0	
Potassium	4660 ug/L		20.0	1	10/26/12 09:04	11/01/12 20:56	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7782-49-2	
Silica	11400 ug/L		268	5	10/26/12 09:04	11/01/12 21:00	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 20:56	7440-22-4	
Sodium	6000 ug/L		50.0	1	10/26/12 09:04	11/01/12 20:56	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:56	7440-28-0	
Total Hardness by 2340B	309000 ug/L		355	5	10/26/12 09:04	11/01/12 21:00		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 20:56	7440-62-2	
Zinc	175 ug/L		5.0	1	10/26/12 09:04	11/01/12 20:56	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	8.6 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:56	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-38-2	
Barium, Dissolved	76.1 ug/L		0.30	1	10/26/12 09:01	11/04/12 01:56	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:56	7440-41-7	
Cadmium, Dissolved	0.85 ug/L		0.080	1	10/26/12 09:01	11/04/12 01:56	7440-43-9	
Calcium, Dissolved	103000 ug/L		100	5	10/26/12 09:01	11/04/12 02:00	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-48-4	
Copper, Dissolved	1.1 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 01:56	7439-89-6	
Lead, Dissolved	0.13 ug/L		0.10	1	10/26/12 09:01	11/04/12 01:56	7439-92-1	B
Magnesium, Dissolved	12700 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:56	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-4-SW_20121017	Lab ID: 60131713009	Collected: 10/18/12 01:09	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	360 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7439-96-5	
Molybdenum, Dissolved	2.3 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7439-98-7	
Nickel, Dissolved	2.5 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-02-0	
Potassium, Dissolved	4650 ug/L		20.0	1	10/26/12 09:01	11/04/12 01:56	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:56	7440-22-4	
Sodium, Dissolved	5960 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:56	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:56	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:56	7440-62-2	
Zinc, Dissolved	166 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:56	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	11.0J ug/L		50.0	1	10/26/12 08:30	11/05/12 14:32	7429-90-5	
Antimony, Dissolved	0.071J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-36-0	
Arsenic, Dissolved	0.56J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-38-2	
Barium, Dissolved	70.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/05/12 14:32	7440-41-7	
Cadmium, Dissolved	0.78 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:07	7440-43-9	
Chromium, Dissolved	0.62J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-47-3	
Cobalt, Dissolved	0.27J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-48-4	
Copper, Dissolved	0.79J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-50-8	
Iron, Dissolved	136 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:07	7439-89-6	
Lead, Dissolved	0.39J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7439-92-1	
Manganese, Dissolved	351 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7439-96-5	
Molybdenum, Dissolved	2.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:07	7440-22-4	
Thallium, Dissolved	0.024J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:07	7440-62-2	
Zinc, Dissolved	153 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:07	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 13:59	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:50	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:22	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	607 umhos/cm		10.0	1			10/29/12 16:06	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	388 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-4-SW_20121017	Lab ID: 60131713009	Collected: 10/18/12 01:09	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.29	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO ₃)	145	mg/L	20.0	1		10/25/12 09:35		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		10/25/12 09:35		
Alkalinity, Total as CaCO ₃	145	mg/L	20.0	1		10/25/12 09:35		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	397	mg/L	5.0	1		10/24/12 15:38		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/25/12 10:30		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:43 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.9	mg/L	1.0	1		10/28/12 20:22 16887-00-6		
Sulfate	167	mg/L	10.0	10		10/28/12 20:38 14808-79-8		
353.2 Nitrogen, NO₂/NO₃ pres.	Analytical Method: EPA 353.2							
Nitrogen, NO ₂ plus NO ₃	ND	mg/L	0.10	1		11/01/12 13:44		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:03 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 17:11 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-G_20121017	Lab ID: 60131713010	Collected: 10/18/12 01:31	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	70100 ug/L		100	1	10/26/12 17:00	10/31/12 14:00	7440-70-2	
Magnesium, Dissolved	9420 ug/L		50.0	1	10/26/12 17:00	10/31/12 14:00	7439-95-4	
Potassium, Dissolved	1880 ug/L		500	1	10/26/12 17:00	10/31/12 14:00	7440-09-7	
Sodium, Dissolved	4150 ug/L		500	1	10/26/12 17:00	10/31/12 14:00	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	10.6 ug/L		4.0	1	10/26/12 09:04	11/01/12 21:05	7429-90-5	B
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-38-2	
Barium	79.8 ug/L		0.30	1	10/26/12 09:04	11/01/12 21:05	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 21:05	7440-41-7	
Cadmium	0.45 ug/L		0.080	1	10/26/12 09:04	11/01/12 21:05	7440-43-9	
Calcium	82600 ug/L		100	5	10/26/12 09:04	11/01/12 21:10	7440-70-2	
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-47-3	
Cobalt	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-48-4	
Copper	0.50 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-50-8	
Iron	53.3 ug/L		50.0	1	10/26/12 09:04	11/01/12 21:05	7439-89-6	
Lead	0.21 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:05	7439-92-1	
Magnesium	10500 ug/L		5.0	1	10/26/12 09:04	11/01/12 21:05	7439-95-4	
Manganese	108 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7439-96-5	
Molybdenum	1.3 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7439-98-7	
Nickel	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-02-0	
Potassium	2080 ug/L		20.0	1	10/26/12 09:04	11/01/12 21:05	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7782-49-2	
Silica	9480 ug/L		268	5	10/26/12 09:04	11/01/12 21:10	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:05	7440-22-4	
Sodium	4600 ug/L		50.0	1	10/26/12 09:04	11/01/12 21:05	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 21:05	7440-28-0	
Total Hardness by 2340B	250000 ug/L		355	5	10/26/12 09:04	11/01/12 21:10		
Vanadium	0.11 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:05	7440-62-2	
Zinc	89.9 ug/L		5.0	1	10/26/12 09:04	11/01/12 21:05	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	5.1 ug/L		4.0	1	10/26/12 09:01	11/04/12 02:04	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-38-2	
Barium, Dissolved	81.2 ug/L		0.30	1	10/26/12 09:01	11/04/12 02:04	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 02:04	7440-41-7	
Cadmium, Dissolved	0.42 ug/L		0.080	1	10/26/12 09:01	11/04/12 02:04	7440-43-9	
Calcium, Dissolved	85400 ug/L		100	5	10/26/12 09:01	11/04/12 02:08	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-48-4	
Copper, Dissolved	0.99 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 02:04	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 02:04	7439-92-1	B
Magnesium, Dissolved	10800 ug/L		5.0	1	10/26/12 09:01	11/04/12 02:04	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: DR-G_20121017	Lab ID: 60131713010	Collected: 10/18/12 01:31	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	97.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7439-96-5	
Molybdenum, Dissolved	1.5 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7439-98-7	
Nickel, Dissolved	2.4 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-02-0	
Potassium, Dissolved	2110 ug/L		20.0	1	10/26/12 09:01	11/04/12 02:04	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:04	7440-22-4	
Sodium, Dissolved	4640 ug/L		50.0	1	10/26/12 09:01	11/04/12 02:04	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 02:04	7440-28-0	
Vanadium, Dissolved	0.11 ug/L		0.10	1	10/26/12 09:01	11/04/12 02:04	7440-62-2	
Zinc, Dissolved	83.9 ug/L		5.0	1	10/26/12 09:01	11/04/12 02:04	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.2J ug/L		50.0	1	10/26/12 08:30	11/05/12 14:36	7429-90-5	
Antimony, Dissolved	0.058J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-36-0	
Arsenic, Dissolved	0.37J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-38-2	
Barium, Dissolved	74.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/05/12 14:36	7440-41-7	
Cadmium, Dissolved	0.40J ug/L		0.50	1	10/26/12 08:30	10/31/12 19:11	7440-43-9	
Chromium, Dissolved	0.60J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-47-3	
Cobalt, Dissolved	0.087J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-48-4	
Copper, Dissolved	0.56J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-50-8	
Iron, Dissolved	50.5 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:11	7439-89-6	
Lead, Dissolved	0.18J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7439-92-1	
Manganese, Dissolved	94.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7439-96-5	
Molybdenum, Dissolved	1.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:11	7440-22-4	
Thallium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:11	7440-62-2	
Zinc, Dissolved	80.1 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:11	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:01	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 10:57	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:24	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	465 umhos/cm		10.0	1			10/29/12 16:06	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	317 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: DR-G_20121017	Lab ID: 60131713010	Collected: 10/18/12 01:31	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.24	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	140	mg/L	20.0	1		10/25/12 09:40		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 09:40		
Alkalinity, Total as CaCO3	140	mg/L	20.0	1		10/25/12 09:40		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	308	mg/L	5.0	1		10/24/12 15:38		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/25/12 10:31		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:44 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.8	mg/L	1.0	1		10/28/12 21:25 16887-00-6		
Sulfate	106	mg/L	10.0	10		10/28/12 21:41 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:45		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:04 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 17:25 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: FB_20121017	Lab ID: 60131713011	Collected: 10/18/12 10:45	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	169 ug/L		100	1	10/26/12 17:00	10/31/12 14:07	7440-70-2	B
Magnesium, Dissolved	27.1J ug/L		50.0	1	10/26/12 17:00	10/31/12 14:07	7439-95-4	
Potassium, Dissolved	162J ug/L		500	1	10/26/12 17:00	10/31/12 14:07	7440-09-7	
Sodium, Dissolved	388J ug/L		500	1	10/26/12 17:00	10/31/12 14:07	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	4.8 ug/L		4.0	1	10/26/12 09:04	11/01/12 21:29	7429-90-5	B
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-36-0	
Arsenic	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-38-2	
Barium	0.58 ug/L		0.30	1	10/26/12 09:04	11/01/12 21:29	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 21:29	7440-41-7	
Cadmium	ND ug/L		0.080	1	10/26/12 09:04	11/01/12 21:29	7440-43-9	
Calcium	97.7 ug/L		20.0	1	10/26/12 09:04	11/01/12 21:29	7440-70-2	B
Chromium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-47-3	
Cobalt	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-48-4	
Copper	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-50-8	
Iron	ND ug/L		50.0	1	10/26/12 09:04	11/01/12 21:29	7439-89-6	
Lead	0.13 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:29	7439-92-1	
Magnesium	19.5 ug/L		5.0	1	10/26/12 09:04	11/01/12 21:29	7439-95-4	B
Manganese	1.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7439-96-5	
Molybdenum	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7439-98-7	
Nickel	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-02-0	
Potassium	71.5 ug/L		20.0	1	10/26/12 09:04	11/01/12 21:29	7440-09-7	B
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7782-49-2	
Silica	87.1 ug/L		53.5	1	10/26/12 09:04	11/01/12 21:29	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 21:29	7440-22-4	
Sodium	362 ug/L		50.0	1	10/26/12 09:04	11/01/12 21:29	7440-23-5	
Thallium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 21:29	7440-28-0	
Total Hardness by 2340B	324 ug/L		71.0	1	10/26/12 09:04	11/01/12 21:29		
Vanadium	ND ug/L		0.10	1	10/26/12 09:04	11/01/12 21:29	7440-62-2	
Zinc	ND ug/L		5.0	1	10/26/12 09:04	11/01/12 21:29	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.3 ug/L		4.0	1	10/26/12 09:01	11/04/12 01:15	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-38-2	
Barium, Dissolved	ND ug/L		0.30	1	10/26/12 09:01	11/04/12 01:15	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 01:15	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.080	1	10/26/12 09:01	11/04/12 01:15	7440-43-9	
Calcium, Dissolved	90.5 ug/L		20.0	1	10/26/12 09:01	11/04/12 01:15	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-48-4	
Copper, Dissolved	0.64 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 01:15	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:15	7439-92-1	B
Magnesium, Dissolved	19.5 ug/L		5.0	1	10/26/12 09:01	11/04/12 01:15	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: FB_20121017	Lab ID: 60131713011	Collected: 10/18/12 10:45	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	0.70 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7439-96-5	
Molybdenum, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7439-98-7	
Nickel, Dissolved	0.73 ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-02-0	
Potassium, Dissolved	71.1 ug/L		20.0	1	10/26/12 09:01	11/04/12 01:15	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 01:15	7440-22-4	
Sodium, Dissolved	378 ug/L		50.0	1	10/26/12 09:01	11/04/12 01:15	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:15	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 01:15	7440-62-2	
Zinc, Dissolved	ND ug/L		5.0	1	10/26/12 09:01	11/04/12 01:15	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	ND ug/L		50.0	1	10/26/12 08:30	11/05/12 14:40	7429-90-5	
Antimony, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-36-0	
Arsenic, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-38-2	
Barium, Dissolved	0.78J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-39-3	B
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/05/12 14:40	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:15	7440-43-9	
Chromium, Dissolved	0.46J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-47-3	
Cobalt, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-48-4	
Copper, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-50-8	
Iron, Dissolved	15.6J ug/L		50.0	1	10/26/12 08:30	10/31/12 19:15	7439-89-6	
Lead, Dissolved	0.19J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7439-92-1	
Manganese, Dissolved	2.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7439-96-5	B
Molybdenum, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:15	7440-22-4	
Thallium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:15	7440-62-2	
Zinc, Dissolved	6.5J ug/L		10.0	1	10/26/12 08:30	10/31/12 19:15	7440-66-6	B
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:07	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:00	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:27	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	ND umhos/cm		10.0	1			10/29/12 16:08	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	ND mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: FB_20121017	Lab ID: 60131713011	Collected: 10/18/12 10:45	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.013 PSU		0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	ND mg/L		20.0	1		10/25/12 09:52		
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1		10/25/12 09:52		
Alkalinity, Total as CaCO3	ND mg/L		20.0	1		10/25/12 09:52		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	ND mg/L		5.0	1		10/25/12 15:51		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND mg/L		5.0	1		10/25/12 10:31		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1		10/25/12 22:44 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	ND mg/L		1.0	1		10/28/12 21:57 16887-00-6		
Sulfate	ND mg/L		1.0	1		10/28/12 21:57 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1		11/01/12 13:48		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1		10/24/12 15:04 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1		11/04/12 17:39 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: GW-1_20121017	Lab ID: 60131713012	Collected: 10/17/12 15:58	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	53500 ug/L		100	1	10/26/12 17:00	10/31/12 14:10	7440-70-2	
Magnesium, Dissolved	6460 ug/L		50.0	1	10/26/12 17:00	10/31/12 14:10	7439-95-4	
Potassium, Dissolved	888 ug/L		500	1	10/26/12 17:00	10/31/12 14:10	7440-09-7	
Sodium, Dissolved	2300 ug/L		500	1	10/26/12 17:00	10/31/12 14:10	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	6690 ug/L		4.0	1	10/26/12 09:04	11/01/12 21:54	7429-90-5	
Antimony	0.57 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-36-0	
Arsenic	11.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-38-2	
Barium	216 ug/L		0.30	1	10/26/12 09:04	11/01/12 21:54	7440-39-3	
Beryllium	0.48 ug/L		0.20	1	10/26/12 09:04	11/01/12 21:54	7440-41-7	
Cadmium	1.5 ug/L		0.080	1	10/26/12 09:04	11/01/12 21:54	7440-43-9	
Calcium	57200 ug/L		100	5	10/26/12 09:04	11/05/12 20:07	7440-70-2	
Chromium	7.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-47-3	
Cobalt	8.3 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-48-4	
Copper	51.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-50-8	
Iron	13300 ug/L		50.0	1	10/26/12 09:04	11/01/12 21:54	7439-89-6	
Lead	43.0 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:54	7439-92-1	
Magnesium	9480 ug/L		5.0	1	10/26/12 09:04	11/01/12 21:54	7439-95-4	
Manganese	1480 ug/L		2.5	5	10/26/12 09:04	11/05/12 20:07	7439-96-5	
Molybdenum	3.6 ug/L		2.5	5	10/26/12 09:04	11/05/12 20:07	7439-98-7	
Nickel	14.0 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-02-0	
Potassium	2460 ug/L		20.0	1	10/26/12 09:04	11/01/12 21:54	7440-09-7	
Selenium	1.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7782-49-2	
Silica	30900 ug/L		1340	25	10/26/12 09:04	11/05/12 20:13	7631-86-9	
Silver	0.74 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:54	7440-22-4	
Sodium	2640 ug/L		50.0	1	10/26/12 09:04	11/01/12 21:54	7440-23-5	
Thallium	0.24 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:54	7440-28-0	
Total Hardness by 2340B	182000 ug/L		355	5	10/26/12 09:04	11/05/12 20:07		
Vanadium	15.8 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:54	7440-62-2	
Zinc	134 ug/L		5.0	1	10/26/12 09:04	11/01/12 21:54	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	4.9 ug/L		4.0	1	10/26/12 09:01	11/04/12 02:12	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-38-2	
Barium, Dissolved	68.9 ug/L		0.30	1	10/26/12 09:01	11/04/12 02:12	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/04/12 02:12	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.080	1	10/26/12 09:01	11/04/12 02:12	7440-43-9	
Calcium, Dissolved	56600 ug/L		100	5	10/26/12 09:01	11/04/12 02:16	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-48-4	
Copper, Dissolved	0.86 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/04/12 02:12	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 02:12	7439-92-1	B
Magnesium, Dissolved	6380 ug/L		5.0	1	10/26/12 09:01	11/04/12 02:12	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: GW-1_20121017	Lab ID: 60131713012	Collected: 10/17/12 15:58	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	2.7 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7439-96-5	
Molybdenum, Dissolved	1.2 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7439-98-7	
Nickel, Dissolved	2.0 ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-02-0	
Potassium, Dissolved	775 ug/L		20.0	1	10/26/12 09:01	11/04/12 02:12	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/04/12 02:12	7440-22-4	
Sodium, Dissolved	2300 ug/L		50.0	1	10/26/12 09:01	11/04/12 02:12	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 02:12	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/04/12 02:12	7440-62-2	
Zinc, Dissolved	ND ug/L		5.0	1	10/26/12 09:01	11/04/12 02:12	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	651 ug/L		50.0	1	10/26/12 08:30	11/05/12 14:48	7429-90-5	
Antimony, Dissolved	0.14J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-36-0	
Arsenic, Dissolved	1.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-38-2	
Barium, Dissolved	108 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-39-3	
Beryllium, Dissolved	0.17J ug/L		0.50	1	10/26/12 08:30	11/05/12 14:48	7440-41-7	
Cadmium, Dissolved	0.56 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:24	7440-43-9	
Chromium, Dissolved	1.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-47-3	
Cobalt, Dissolved	1.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-48-4	
Copper, Dissolved	11.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-50-8	
Iron, Dissolved	1150 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:24	7439-89-6	
Lead, Dissolved	11.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7439-92-1	
Manganese, Dissolved	290 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7439-96-5	
Molybdenum, Dissolved	0.24J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7439-98-7	
Nickel, Dissolved	2.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-02-0	
Selenium, Dissolved	0.40J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7782-49-2	
Silver, Dissolved	0.28J ug/L		0.50	1	10/26/12 08:30	10/31/12 19:24	7440-22-4	
Thallium, Dissolved	0.10J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-28-0	
Vanadium, Dissolved	1.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:24	7440-62-2	
Zinc, Dissolved	36.3 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:24	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:10	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:02	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:29	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	337 umhos/cm		10.0	1			10/29/12 16:09	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	216 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-1_20121017	Lab ID: 60131713012	Collected: 10/17/12 15:58	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.16 PSU		0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	106 mg/L		20.0	1		10/25/12 09:56		
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1		10/25/12 09:56		
Alkalinity, Total as CaCO3	106 mg/L		20.0	1		10/25/12 09:56		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	196 mg/L		5.0	1		10/24/12 15:32		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	302 mg/L		5.0	1		10/24/12 11:26		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1		10/24/12 23:54 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.5 mg/L		1.0	1		10/28/12 22:13 16887-00-6		
Sulfate	58.5 mg/L		5.0	5		10/28/12 22:29 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1		11/01/12 13:51		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1		10/24/12 15:07 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1		11/04/12 17:53 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-3_20121017	Lab ID: 60131713013	Collected: 10/18/12 10:27	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	134000	ug/L	100	1	10/26/12 17:00	10/31/12 14:13	7440-70-2	
Magnesium, Dissolved	17100	ug/L	50.0	1	10/26/12 17:00	10/31/12 14:13	7439-95-4	
Potassium, Dissolved	2820	ug/L	500	1	10/26/12 17:00	10/31/12 14:13	7440-09-7	
Sodium, Dissolved	2950	ug/L	500	1	10/26/12 17:00	10/31/12 14:13	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	4990	ug/L	4.0	1	10/26/12 09:04	11/01/12 22:03	7429-90-5	
Antimony	ND	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-36-0	
Arsenic	8.2	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-38-2	
Barium	111	ug/L	0.30	1	10/26/12 09:04	11/01/12 22:03	7440-39-3	
Beryllium	0.40	ug/L	0.20	1	10/26/12 09:04	11/01/12 22:03	7440-41-7	
Cadmium	2.7	ug/L	0.080	1	10/26/12 09:04	11/01/12 22:03	7440-43-9	
Calcium	156000	ug/L	200	10	10/26/12 09:04	11/01/12 22:08	7440-70-2	
Chromium	6.5	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-47-3	
Cobalt	4.6	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-48-4	
Copper	52.3	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-50-8	
Iron	8820	ug/L	50.0	1	10/26/12 09:04	11/01/12 22:03	7439-89-6	
Lead	81.6	ug/L	0.10	1	10/26/12 09:04	11/01/12 22:03	7439-92-1	
Magnesium	20800	ug/L	5.0	1	10/26/12 09:04	11/01/12 22:03	7439-95-4	
Manganese	1550	ug/L	5.0	10	10/26/12 09:04	11/01/12 22:08	7439-96-5	
Molybdenum	1.2	ug/L	1.0	2	10/26/12 09:04	11/05/12 20:55	7439-98-7	
Nickel	6.9	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-02-0	
Potassium	3850	ug/L	20.0	1	10/26/12 09:04	11/01/12 22:03	7440-09-7	
Selenium	2.9	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7782-49-2	
Silica	30800	ug/L	535	10	10/26/12 09:04	11/01/12 22:08	7631-86-9	
Silver	0.62	ug/L	0.50	1	10/26/12 09:04	11/01/12 22:03	7440-22-4	
Sodium	3320	ug/L	50.0	1	10/26/12 09:04	11/01/12 22:03	7440-23-5	
Thallium	0.13	ug/L	0.10	1	10/26/12 09:04	11/01/12 22:03	7440-28-0	
Total Hardness by 2340B	474000	ug/L	710	10	10/26/12 09:04	11/01/12 22:08		
Vanadium	10.3	ug/L	0.10	1	10/26/12 09:04	11/01/12 22:03	7440-62-2	
Zinc	372	ug/L	5.0	1	10/26/12 09:04	11/01/12 22:03	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	313	ug/L	4.0	1	10/26/12 09:01	11/05/12 22:12	7429-90-5	
Antimony, Dissolved	ND	ug/L	0.50	1	10/26/12 09:01	11/05/12 22:12	7440-36-0	
Arsenic, Dissolved	0.72	ug/L	0.50	1	10/26/12 09:01	11/05/12 22:12	7440-38-2	
Barium, Dissolved	27.1	ug/L	0.30	1	10/26/12 09:01	11/05/12 22:12	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.20	1	10/26/12 09:01	11/05/12 22:12	7440-41-7	
Cadmium, Dissolved	0.69	ug/L	0.080	1	10/26/12 09:01	11/05/12 22:12	7440-43-9	
Calcium, Dissolved	145000	ug/L	200	10	10/26/12 09:01	11/05/12 22:16	7440-70-2	
Chromium, Dissolved	0.66	ug/L	0.50	1	10/26/12 09:01	11/05/12 22:12	7440-47-3	
Cobalt, Dissolved	ND	ug/L	0.50	1	10/26/12 09:01	11/05/12 22:12	7440-48-4	
Copper, Dissolved	4.9	ug/L	0.50	1	10/26/12 09:01	11/05/12 22:12	7440-50-8	
Iron, Dissolved	534	ug/L	50.0	1	10/26/12 09:01	11/05/12 22:12	7439-89-6	
Lead, Dissolved	5.1	ug/L	0.10	1	10/26/12 09:01	11/05/12 22:12	7439-92-1	
Magnesium, Dissolved	17800	ug/L	5.0	1	10/26/12 09:01	11/05/12 22:12	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-3_20121017	Lab ID: 60131713013	Collected: 10/18/12 10:27	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	145 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:12	7439-96-5	
Molybdenum, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:12	7439-98-7	
Nickel, Dissolved	3.0 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:12	7440-02-0	
Potassium, Dissolved	3070 ug/L		20.0	1	10/26/12 09:01	11/05/12 22:12	7440-09-7	
Selenium, Dissolved	1.4 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:12	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:12	7440-22-4	
Sodium, Dissolved	3190 ug/L		50.0	1	10/26/12 09:01	11/05/12 22:12	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:12	7440-28-0	B
Vanadium, Dissolved	0.61 ug/L		0.10	1	10/26/12 09:01	11/05/12 22:12	7440-62-2	
Zinc, Dissolved	97.0 ug/L		5.0	1	10/26/12 09:01	11/05/12 22:12	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	1230 ug/L		100	2	10/26/12 08:30	11/07/12 13:21	7429-90-5	
Antimony, Dissolved	0.17J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-36-0	
Arsenic, Dissolved	2.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-38-2	
Barium, Dissolved	48.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-39-3	
Beryllium, Dissolved	ND ug/L		1.0	2	10/26/12 08:30	11/07/12 13:21	7440-41-7	D3
Cadmium, Dissolved	1.4 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:28	7440-43-9	
Chromium, Dissolved	2.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-47-3	
Cobalt, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-48-4	
Copper, Dissolved	22.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-50-8	
Iron, Dissolved	2440 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:28	7439-89-6	
Lead, Dissolved	36.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7439-92-1	
Manganese, Dissolved	544 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7439-96-5	
Molybdenum, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7439-98-7	
Nickel, Dissolved	2.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-02-0	
Selenium, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7782-49-2	
Silver, Dissolved	0.26J ug/L		0.50	1	10/26/12 08:30	10/31/12 19:28	7440-22-4	
Thallium, Dissolved	0.027J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-28-0	
Vanadium, Dissolved	2.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:28	7440-62-2	
Zinc, Dissolved	193 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:28	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:12	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:05	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:31	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	812 umhos/cm		10.0	1			10/29/12 16:09	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	520 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-3_20121017	Lab ID: 60131713013	Collected: 10/18/12 10:27	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.40	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	211	mg/L	20.0	1		10/25/12 10:00		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:00		
Alkalinity, Total as CaCO3	211	mg/L	20.0	1		10/25/12 10:00		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	549	mg/L	5.0	1		10/25/12 15:52		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	412	mg/L	5.0	1		10/25/12 10:31		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:45 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.5	mg/L	1.0	1		10/28/12 22:45 16887-00-6		
Sulfate	216	mg/L	20.0	20		10/28/12 23:01 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:53		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:07 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 18:07 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-4_20121017	Lab ID: 60131713014	Collected: 10/18/12 16:50	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	259000 ug/L		100	1	10/26/12 17:00	10/31/12 14:17	7440-70-2	
Magnesium, Dissolved	31300 ug/L		50.0	1	10/26/12 17:00	10/31/12 14:17	7439-95-4	
Potassium, Dissolved	2090 ug/L		500	1	10/26/12 17:00	10/31/12 14:17	7440-09-7	
Sodium, Dissolved	7630 ug/L		500	1	10/26/12 17:00	10/31/12 14:17	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	1850 ug/L		4.0	1	10/26/12 09:04	11/01/12 22:12	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-36-0	
Arsenic	2.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-38-2	
Barium	65.7 ug/L		0.30	1	10/26/12 09:04	11/01/12 22:12	7440-39-3	
Beryllium	ND ug/L		0.20	1	10/26/12 09:04	11/01/12 22:12	7440-41-7	
Cadmium	0.83 ug/L		0.080	1	10/26/12 09:04	11/01/12 22:12	7440-43-9	
Calcium	292000 ug/L		500	25	10/26/12 09:04	11/05/12 20:21	7440-70-2	
Chromium	2.6 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-47-3	
Cobalt	2.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-48-4	
Copper	10.1 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-50-8	
Iron	5960 ug/L		50.0	1	10/26/12 09:04	11/01/12 22:12	7439-89-6	
Lead	11.7 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:12	7439-92-1	
Magnesium	34800 ug/L		25.0	5	10/26/12 09:04	11/05/12 20:17	7439-95-4	
Manganese	1010 ug/L		2.5	5	10/26/12 09:04	11/05/12 20:17	7439-96-5	
Molybdenum	11.0 ug/L		2.5	5	10/26/12 09:04	11/05/12 20:17	7439-98-7	
Nickel	2.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-02-0	
Potassium	2660 ug/L		20.0	1	10/26/12 09:04	11/01/12 22:12	7440-09-7	
Selenium	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7782-49-2	
Silica	17200 ug/L		268	5	10/26/12 09:04	11/05/12 20:17	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 22:12	7440-22-4	
Sodium	8420 ug/L		50.0	1	10/26/12 09:04	11/01/12 22:12	7440-23-5	
Thallium	0.10 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:12	7440-28-0	
Total Hardness by 2340B	874000 ug/L		1780	25	10/26/12 09:04	11/05/12 20:21		
Vanadium	4.0 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:12	7440-62-2	
Zinc	104 ug/L		5.0	1	10/26/12 09:04	11/01/12 22:12	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	5.7 ug/L		4.0	1	10/26/12 09:01	11/05/12 22:20	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-36-0	
Arsenic, Dissolved	0.62 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-38-2	
Barium, Dissolved	42.4 ug/L		0.30	1	10/26/12 09:01	11/05/12 22:20	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/05/12 22:20	7440-41-7	
Cadmium, Dissolved	0.24 ug/L		0.080	1	10/26/12 09:01	11/05/12 22:20	7440-43-9	
Calcium, Dissolved	284000 ug/L		200	10	10/26/12 09:01	11/05/12 22:24	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-47-3	
Cobalt, Dissolved	1.4 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-48-4	
Copper, Dissolved	1.1 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-50-8	
Iron, Dissolved	2320 ug/L		50.0	1	10/26/12 09:01	11/05/12 22:20	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:20	7439-92-1	B
Magnesium, Dissolved	33100 ug/L		50.0	10	10/26/12 09:01	11/05/12 22:24	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-4_20121017	Lab ID: 60131713014	Collected: 10/18/12 16:50	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	947 ug/L		5.0	10	10/26/12 09:01	11/05/12 22:24	7439-96-5	
Molybdenum, Dissolved	11.0 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7439-98-7	
Nickel, Dissolved	3.1 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-02-0	
Potassium, Dissolved	2300 ug/L		20.0	1	10/26/12 09:01	11/05/12 22:20	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:20	7440-22-4	
Sodium, Dissolved	8430 ug/L		50.0	1	10/26/12 09:01	11/05/12 22:20	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:20	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:20	7440-62-2	
Zinc, Dissolved	47.7 ug/L		5.0	1	10/26/12 09:01	11/05/12 22:20	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	549 ug/L		50.0	1	10/26/12 08:30	11/05/12 14:56	7429-90-5	
Antimony, Dissolved	0.049J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-36-0	
Arsenic, Dissolved	1.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-38-2	
Barium, Dissolved	41.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-39-3	
Beryllium, Dissolved	0.090J ug/L		0.50	1	10/26/12 08:30	11/05/12 14:56	7440-41-7	
Cadmium, Dissolved	0.66 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:32	7440-43-9	
Chromium, Dissolved	2.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-47-3	
Cobalt, Dissolved	1.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-48-4	
Copper, Dissolved	5.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-50-8	
Iron, Dissolved	4140 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:32	7439-89-6	
Lead, Dissolved	9.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7439-92-1	
Manganese, Dissolved	951 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7439-96-5	
Molybdenum, Dissolved	10.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7439-98-7	
Nickel, Dissolved	0.40J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:32	7440-22-4	
Thallium, Dissolved	0.074J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-28-0	
Vanadium, Dissolved	1.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:32	7440-62-2	
Zinc, Dissolved	81.6 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:32	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:14	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:07	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:33	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1560 umhos/cm		10.0	1			10/29/12 16:10	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	996 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: GW-4_20121017	Lab ID: 60131713014	Collected: 10/18/12 16:50	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.78	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	99.1	mg/L	20.0	1		10/25/12 10:04		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:04		
Alkalinity, Total as CaCO3	99.1	mg/L	20.0	1		10/25/12 10:04		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1240	mg/L	5.0	1		10/25/12 15:52		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	100	mg/L	5.0	1		10/25/12 10:33		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:45 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.9	mg/L	1.0	1		10/28/12 23:17 16887-00-6		
Sulfate	762	mg/L	50.0	50		10/29/12 13:47 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:54		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:11 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 18:50 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-5_20121017	Lab ID: 60131713015	Collected: 10/17/12 16:17	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	426000 ug/L		100	1	10/26/12 17:00	10/31/12 14:27	7440-70-2	
Magnesium, Dissolved	40100 ug/L		50.0	1	10/26/12 17:00	10/31/12 14:27	7439-95-4	
Potassium, Dissolved	5300 ug/L		500	1	10/26/12 17:00	10/31/12 14:27	7440-09-7	
Sodium, Dissolved	6520 ug/L		500	1	10/26/12 17:00	10/31/12 14:27	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	3130 ug/L		4.0	1	10/26/12 09:04	11/01/12 22:21	7429-90-5	
Antimony	1.0 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-36-0	
Arsenic	148 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-38-2	
Barium	32.7 ug/L		0.30	1	10/26/12 09:04	11/01/12 22:21	7440-39-3	
Beryllium	0.42 ug/L		0.20	1	10/26/12 09:04	11/01/12 22:21	7440-41-7	
Cadmium	35.0 ug/L		0.080	1	10/26/12 09:04	11/01/12 22:21	7440-43-9	
Calcium	481000 ug/L		1000	50	10/26/12 09:04	11/05/12 20:32	7440-70-2	
Chromium	2.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-47-3	
Cobalt	17.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-48-4	
Copper	400 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-50-8	
Iron	26700 ug/L		250	5	10/26/12 09:04	11/05/12 20:25	7439-89-6	
Lead	4720 ug/L		2.0	20	10/26/12 09:04	11/01/12 22:27	7439-92-1	
Magnesium	44400 ug/L		25.0	5	10/26/12 09:04	11/05/12 20:25	7439-95-4	
Manganese	6910 ug/L		10.0	20	10/26/12 09:04	11/01/12 22:27	7439-96-5	
Molybdenum	11.6 ug/L		2.5	5	10/26/12 09:04	11/05/12 20:25	7439-98-7	
Nickel	21.3 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-02-0	
Potassium	5870 ug/L		20.0	1	10/26/12 09:04	11/01/12 22:21	7440-09-7	
Selenium	0.91 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7782-49-2	
Silica	42200 ug/L		1070	20	10/26/12 09:04	11/01/12 22:27	7631-86-9	
Silver	16.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:21	7440-22-4	
Sodium	6620 ug/L		50.0	1	10/26/12 09:04	11/01/12 22:21	7440-23-5	
Thallium	0.53 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:21	7440-28-0	
Total Hardness by 2340B	1380000 ug/L		3550	50	10/26/12 09:04	11/05/12 20:32		
Vanadium	5.0 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:21	7440-62-2	
Zinc	19600 ug/L		250	50	10/26/12 09:04	11/05/12 20:32	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	33.3 ug/L		4.0	1	10/26/12 09:01	11/05/12 22:28	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-36-0	
Arsenic, Dissolved	55.9 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-38-2	
Barium, Dissolved	14.8 ug/L		0.30	1	10/26/12 09:01	11/05/12 22:28	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/05/12 22:28	7440-41-7	
Cadmium, Dissolved	3.6 ug/L		0.080	1	10/26/12 09:01	11/05/12 22:28	7440-43-9	
Calcium, Dissolved	493000 ug/L		400	20	10/26/12 09:01	11/05/12 22:33	7440-70-2	
Chromium, Dissolved	0.57 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-47-3	
Cobalt, Dissolved	12.3 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-48-4	
Copper, Dissolved	2.5 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-50-8	
Iron, Dissolved	9900 ug/L		50.0	1	10/26/12 09:01	11/05/12 22:28	7439-89-6	
Lead, Dissolved	42.8 ug/L		0.10	1	10/26/12 09:01	11/05/12 22:28	7439-92-1	
Magnesium, Dissolved	45600 ug/L		100	20	10/26/12 09:01	11/05/12 22:33	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-5_20121017	Lab ID: 60131713015	Collected: 10/17/12 16:17	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	5970 ug/L		10.0	20	10/26/12 09:01	11/05/12 22:33	7439-96-5	
Molybdenum, Dissolved	7.9 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7439-98-7	
Nickel, Dissolved	16.3 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-02-0	
Potassium, Dissolved	5520 ug/L		20.0	1	10/26/12 09:01	11/05/12 22:28	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:28	7440-22-4	
Sodium, Dissolved	6800 ug/L		50.0	1	10/26/12 09:01	11/05/12 22:28	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:28	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:28	7440-62-2	
Zinc, Dissolved	13700 ug/L		100	20	10/26/12 09:01	11/05/12 22:33	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	1420 ug/L		100	2	10/26/12 08:30	11/07/12 13:25	7429-90-5	
Antimony, Dissolved	0.33J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-36-0	
Arsenic, Dissolved	116 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-38-2	
Barium, Dissolved	14.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-39-3	
Beryllium, Dissolved	0.30J ug/L		1.0	2	10/26/12 08:30	11/07/12 13:25	7440-41-7	
Cadmium, Dissolved	20.0 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:44	7440-43-9	
Chromium, Dissolved	2.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-47-3	
Cobalt, Dissolved	12.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-48-4	
Copper, Dissolved	124 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-50-8	
Iron, Dissolved	15500 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:44	7439-89-6	
Lead, Dissolved	3500 ug/L		100	100	10/26/12 08:30	11/05/12 15:48	7439-92-1	
Manganese, Dissolved	5830 ug/L		100	100	10/26/12 08:30	11/05/12 15:48	7439-96-5	
Molybdenum, Dissolved	8.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7439-98-7	
Nickel, Dissolved	12.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:44	7440-22-4	
Thallium, Dissolved	0.19J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-28-0	
Vanadium, Dissolved	1.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:44	7440-62-2	
Zinc, Dissolved	13600 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:44	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:16	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:15	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:38	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	2230 umhos/cm		10.0	1			10/29/12 16:15	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	1430 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-5_20121017	Lab ID: 60131713015	Collected: 10/17/12 16:17	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	1.1	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	150	mg/L	20.0	1		10/25/12 10:11		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:11		
Alkalinity, Total as CaCO3	150	mg/L	20.0	1		10/25/12 10:11		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1990	mg/L	5.0	1		10/24/12 15:32		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	238	mg/L	5.0	1		10/24/12 11:26		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:54	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.7	mg/L	1.0	1		10/28/12 23:49	16887-00-6	
Sulfate	1250	mg/L	100	100		10/29/12 00:36	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:55		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:11	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 19:04	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-6_20121017	Lab ID: 60131713016	Collected: 10/17/12 17:02	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	380000 ug/L		500	5	10/26/12 17:00	10/31/12 14:31	7440-70-2	
Magnesium, Dissolved	75200 ug/L		250	5	10/26/12 17:00	10/31/12 14:31	7439-95-4	
Potassium, Dissolved	18400 ug/L		2500	5	10/26/12 17:00	10/31/12 14:31	7440-09-7	
Sodium, Dissolved	4800 ug/L		2500	5	10/26/12 17:00	10/31/12 14:31	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	19400 ug/L		4.0	1	10/26/12 09:04	11/01/12 21:14	7429-90-5	
Antimony	2.8 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7440-36-0	
Arsenic	263 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7440-38-2	
Barium	178 ug/L		0.30	1	10/26/12 09:04	11/01/12 21:14	7440-39-3	
Beryllium	2.7 ug/L		0.20	1	10/26/12 09:04	11/01/12 21:14	7440-41-7	
Cadmium	45.4 ug/L		0.080	1	10/26/12 09:04	11/01/12 21:14	7440-43-9	
Calcium	420000 ug/L		400	20	10/26/12 09:04	11/01/12 21:19	7440-70-2	
Chromium	23.8 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7440-47-3	
Cobalt	18.8 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7440-48-4	
Copper	583 ug/L		10.0	20	10/26/12 09:04	11/01/12 21:19	7440-50-8	
Iron	208000 ug/L		1000	20	10/26/12 09:04	11/01/12 21:19	7439-89-6	
Lead	7270 ug/L		2.0	20	10/26/12 09:04	11/01/12 21:19	7439-92-1	
Magnesium	86800 ug/L		100	20	10/26/12 09:04	11/01/12 21:19	7439-95-4	
Manganese	19900 ug/L		50.0	100	10/26/12 09:04	11/01/12 21:24	7439-96-5	
Molybdenum	16.6 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7439-98-7	
Nickel	28.5 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7440-02-0	
Potassium	22000 ug/L		20.0	1	10/26/12 09:04	11/01/12 21:14	7440-09-7	
Selenium	4.0 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7782-49-2	
Silica	98800 ug/L		5350	100	10/26/12 09:04	11/01/12 21:24	7631-86-9	
Silver	19.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 21:14	7440-22-4	
Sodium	5170 ug/L		50.0	1	10/26/12 09:04	11/01/12 21:14	7440-23-5	
Thallium	1.0 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:14	7440-28-0	
Total Hardness by 2340B	1410000 ug/L		1420	20	10/26/12 09:04	11/01/12 21:19		
Vanadium	37.7 ug/L		0.10	1	10/26/12 09:04	11/01/12 21:14	7440-62-2	
Zinc	14900 ug/L		500	100	10/26/12 09:04	11/01/12 21:24	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	803 ug/L		4.0	1	10/26/12 09:01	11/05/12 22:53	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-36-0	
Arsenic, Dissolved	104 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-38-2	
Barium, Dissolved	36.7 ug/L		0.30	1	10/26/12 09:01	11/05/12 22:53	7440-39-3	
Beryllium, Dissolved	0.86 ug/L		0.20	1	10/26/12 09:01	11/05/12 22:53	7440-41-7	
Cadmium, Dissolved	2.0 ug/L		0.080	1	10/26/12 09:01	11/05/12 22:53	7440-43-9	
Calcium, Dissolved	395000 ug/L		400	20	10/26/12 09:01	11/05/12 22:59	7440-70-2	
Chromium, Dissolved	1.2 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-47-3	
Cobalt, Dissolved	3.2 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-48-4	
Copper, Dissolved	18.7 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-50-8	
Iron, Dissolved	121000 ug/L		1000	20	10/26/12 09:01	11/05/12 22:59	7439-89-6	
Lead, Dissolved	237 ug/L		0.10	1	10/26/12 09:01	11/05/12 22:53	7439-92-1	
Magnesium, Dissolved	75000 ug/L		100	20	10/26/12 09:01	11/05/12 22:59	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-6_20121017	Lab ID: 60131713016	Collected: 10/17/12 17:02	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	15600 ug/L		50.0	100	10/26/12 09:01	11/05/12 23:03	7439-96-5	
Molybdenum, Dissolved	9.2 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7439-98-7	
Nickel, Dissolved	6.2 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-02-0	
Potassium, Dissolved	19500 ug/L		20.0	1	10/26/12 09:01	11/05/12 22:53	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7782-49-2	
Silver, Dissolved	0.63 ug/L		0.50	1	10/26/12 09:01	11/05/12 22:53	7440-22-4	
Sodium, Dissolved	5070 ug/L		50.0	1	10/26/12 09:01	11/05/12 22:53	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 22:53	7440-28-0	B
Vanadium, Dissolved	1.3 ug/L		0.10	1	10/26/12 09:01	11/05/12 22:53	7440-62-2	
Zinc, Dissolved	7250 ug/L		100	20	10/26/12 09:01	11/05/12 22:59	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	4370 ug/L		50.0	1	10/26/12 08:30	11/05/12 15:24	7429-90-5	
Antimony, Dissolved	0.68J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-36-0	
Arsenic, Dissolved	177 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-38-2	
Barium, Dissolved	29.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-39-3	
Beryllium, Dissolved	1.6 ug/L		0.50	1	10/26/12 08:30	11/05/12 15:24	7440-41-7	
Cadmium, Dissolved	13.5 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:49	7440-43-9	
Chromium, Dissolved	5.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-47-3	
Cobalt, Dissolved	5.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-48-4	
Copper, Dissolved	124 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-50-8	
Iron, Dissolved	135000 ug/L		10000	200	10/26/12 08:30	11/07/12 13:29	7439-89-6	
Lead, Dissolved	4320 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7439-92-1	
Manganese, Dissolved	16500 ug/L		200	200	10/26/12 08:30	11/07/12 13:29	7439-96-5	
Molybdenum, Dissolved	5.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7439-98-7	
Nickel, Dissolved	6.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-02-0	
Selenium, Dissolved	0.55J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:49	7440-22-4	
Thallium, Dissolved	0.22J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-28-0	
Vanadium, Dissolved	9.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:49	7440-62-2	
Zinc, Dissolved	7510 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:49	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:26	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:17	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:44	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	2070 umhos/cm		10.0	1			10/29/12 16:17	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	1320 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-6_20121017	Lab ID: 60131713016	Collected: 10/17/12 17:02	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	1.1	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	54.0	mg/L	20.0	1		10/25/12 10:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:14		
Alkalinity, Total as CaCO3	54.0	mg/L	20.0	1		10/25/12 10:14		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	2000	mg/L	5.0	1		10/24/12 15:32		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	1070	mg/L	5.0	1		10/24/12 11:27		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:55	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.5	mg/L	1.0	1		10/29/12 00:52	16887-00-6	
Sulfate	1390	mg/L	100	100		10/29/12 01:08	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	0.30	mg/L	0.10	1		11/01/12 13:56		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:12	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	1.2	mg/L	1.0	1		11/04/12 19:18	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-7_20121017	Lab ID: 60131713017	Collected: 10/17/12 16:41	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	252000 ug/L		100	1	10/26/12 17:00	10/31/12 14:34	7440-70-2	
Magnesium, Dissolved	25000 ug/L		50.0	1	10/26/12 17:00	10/31/12 14:34	7439-95-4	
Potassium, Dissolved	2630 ug/L		500	1	10/26/12 17:00	10/31/12 14:34	7440-09-7	
Sodium, Dissolved	7210 ug/L		500	1	10/26/12 17:00	10/31/12 14:34	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	17600 ug/L		4.0	1	10/26/12 09:04	11/01/12 22:31	7429-90-5	
Antimony	1.0 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-36-0	
Arsenic	22.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-38-2	
Barium	51.9 ug/L		0.30	1	10/26/12 09:04	11/01/12 22:31	7440-39-3	
Beryllium	2.0 ug/L		0.20	1	10/26/12 09:04	11/01/12 22:31	7440-41-7	
Cadmium	8.0 ug/L		0.080	1	10/26/12 09:04	11/01/12 22:31	7440-43-9	
Calcium	299000 ug/L		400	20	10/26/12 09:04	11/01/12 22:36	7440-70-2	
Chromium	24.6 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-47-3	
Cobalt	6.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-48-4	
Copper	273 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-50-8	
Iron	43700 ug/L		250	5	10/26/12 09:04	11/05/12 21:01	7439-89-6	
Lead	1040 ug/L		0.50	5	10/26/12 09:04	11/05/12 21:01	7439-92-1	
Magnesium	35900 ug/L		25.0	5	10/26/12 09:04	11/05/12 21:01	7439-95-4	
Manganese	319 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7439-96-5	
Molybdenum	6.5 ug/L		2.5	5	10/26/12 09:04	11/05/12 21:01	7439-98-7	
Nickel	17.8 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-02-0	
Potassium	4720 ug/L		20.0	1	10/26/12 09:04	11/01/12 22:31	7440-09-7	
Selenium	12.6 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7782-49-2	
Silica	53600 ug/L		1070	20	10/26/12 09:04	11/01/12 22:36	7631-86-9	
Silver	4.1 ug/L		0.50	1	10/26/12 09:04	11/01/12 22:31	7440-22-4	
Sodium	7570 ug/L		50.0	1	10/26/12 09:04	11/01/12 22:31	7440-23-5	
Thallium	0.51 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:31	7440-28-0	
Total Hardness by 2340B	893000 ug/L		1420	20	10/26/12 09:04	11/01/12 22:36		
Vanadium	19.8 ug/L		0.10	1	10/26/12 09:04	11/01/12 22:31	7440-62-2	
Zinc	1300 ug/L		25.0	5	10/26/12 09:04	11/05/12 21:01	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	93.7 ug/L		4.0	1	10/26/12 09:01	11/05/12 23:07	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-38-2	
Barium, Dissolved	13.6 ug/L		0.30	1	10/26/12 09:01	11/05/12 23:07	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/05/12 23:07	7440-41-7	
Cadmium, Dissolved	3.7 ug/L		0.080	1	10/26/12 09:01	11/05/12 23:07	7440-43-9	
Calcium, Dissolved	267000 ug/L		400	20	10/26/12 09:01	11/05/12 23:11	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-47-3	
Cobalt, Dissolved	0.96 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-48-4	
Copper, Dissolved	6.0 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/05/12 23:07	7439-89-6	
Lead, Dissolved	5.6 ug/L		0.10	1	10/26/12 09:01	11/05/12 23:07	7439-92-1	
Magnesium, Dissolved	26900 ug/L		100	20	10/26/12 09:01	11/05/12 23:11	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: GW-7_20121017	Lab ID: 60131713017	Collected: 10/17/12 16:41	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	32.5 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7439-96-5	
Molybdenum, Dissolved	1.1 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7439-98-7	
Nickel, Dissolved	4.8 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-02-0	
Potassium, Dissolved	2700 ug/L		20.0	1	10/26/12 09:01	11/05/12 23:07	7440-09-7	
Selenium, Dissolved	1.7 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:07	7440-22-4	
Sodium, Dissolved	7800 ug/L		50.0	1	10/26/12 09:01	11/05/12 23:07	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 23:07	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 23:07	7440-62-2	
Zinc, Dissolved	191 ug/L		5.0	1	10/26/12 09:01	11/05/12 23:07	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	3830 ug/L		100	2	10/26/12 08:30	11/07/12 13:33	7429-90-5	
Antimony, Dissolved	0.15J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-36-0	
Arsenic, Dissolved	3.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-38-2	
Barium, Dissolved	15.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-39-3	
Beryllium, Dissolved	0.72J ug/L		1.0	2	10/26/12 08:30	11/07/12 13:33	7440-41-7	
Cadmium, Dissolved	3.6 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:53	7440-43-9	
Chromium, Dissolved	3.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-47-3	
Cobalt, Dissolved	1.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-48-4	
Copper, Dissolved	77.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-50-8	
Iron, Dissolved	7080 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:53	7439-89-6	
Lead, Dissolved	330 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7439-92-1	
Manganese, Dissolved	55.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7439-96-5	
Molybdenum, Dissolved	0.81J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7439-98-7	
Nickel, Dissolved	3.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-02-0	
Selenium, Dissolved	2.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7782-49-2	
Silver, Dissolved	0.30J ug/L		0.50	1	10/26/12 08:30	10/31/12 19:53	7440-22-4	
Thallium, Dissolved	0.16J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-28-0	
Vanadium, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:53	7440-62-2	
Zinc, Dissolved	333 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:53	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:28	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:19	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:47	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1400 umhos/cm		10.0	1			10/29/12 16:17	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	897 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: GW-7_20121017	Lab ID: 60131713017	Collected: 10/17/12 16:41	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.70	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	235	mg/L	20.0	1		10/25/12 10:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:18		
Alkalinity, Total as CaCO3	235	mg/L	20.0	1		10/25/12 10:18		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1050	mg/L	5.0	1		10/24/12 15:33		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	1320	mg/L	5.0	1		10/24/12 11:27		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:55 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.3	mg/L	1.0	1		10/29/12 01:24 16887-00-6		
Sulfate	567	mg/L	50.0	50		10/29/12 01:40 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	0.47	mg/L	0.10	1		11/01/12 13:57		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:13 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	1.6	mg/L	1.0	1		11/04/12 19:32 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: EB-1_20121017	Lab ID: 60131713018	Collected: 10/17/12 16:26	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	442000 ug/L		100	1	10/26/12 17:00	10/31/12 14:38	7440-70-2	
Magnesium, Dissolved	27800 ug/L		50.0	1	10/26/12 17:00	10/31/12 14:38	7439-95-4	
Potassium, Dissolved	5830 ug/L		500	1	10/26/12 17:00	10/31/12 14:38	7440-09-7	
Sodium, Dissolved	6990 ug/L		500	1	10/26/12 17:00	10/31/12 14:38	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	322 ug/L		20.0	5	10/26/12 09:04	11/01/12 22:52	7429-90-5	
Antimony	ND ug/L		5.0	10	10/26/12 09:04	11/05/12 21:07	7440-36-0	D3
Arsenic	4.7 ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7440-38-2	
Barium	15.9 ug/L		1.5	5	10/26/12 09:04	11/01/12 22:52	7440-39-3	
Beryllium	ND ug/L		1.0	5	10/26/12 09:04	11/01/12 22:52	7440-41-7	D3
Cadmium	0.73 ug/L		0.40	5	10/26/12 09:04	11/01/12 22:52	7440-43-9	
Calcium	510000 ug/L		1000	50	10/26/12 09:04	11/01/12 22:56	7440-70-2	
Chromium	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7440-47-3	D3
Cobalt	5.6 ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7440-48-4	
Copper	14.6 ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7440-50-8	
Iron	7740 ug/L		250	5	10/26/12 09:04	11/01/12 22:52	7439-89-6	
Lead	94.6 ug/L		0.50	5	10/26/12 09:04	11/01/12 22:52	7439-92-1	
Magnesium	31300 ug/L		25.0	5	10/26/12 09:04	11/01/12 22:52	7439-95-4	
Manganese	4360 ug/L		5.0	10	10/26/12 09:04	11/05/12 21:07	7439-96-5	
Molybdenum	12.9 ug/L		5.0	10	10/26/12 09:04	11/05/12 21:07	7439-98-7	
Nickel	5.2 ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7440-02-0	
Potassium	5960 ug/L		100	5	10/26/12 09:04	11/01/12 22:52	7440-09-7	
Selenium	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7782-49-2	D3
Silica	25300 ug/L		535	10	10/26/12 09:04	11/05/12 21:07	7631-86-9	
Silver	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 22:52	7440-22-4	D3
Sodium	6960 ug/L		250	5	10/26/12 09:04	11/01/12 22:52	7440-23-5	
Thallium	ND ug/L		0.50	5	10/26/12 09:04	11/01/12 22:52	7440-28-0	D3
Total Hardness by 2340B	1400000 ug/L		3550	50	10/26/12 09:04	11/01/12 22:56		
Vanadium	0.57 ug/L		0.50	5	10/26/12 09:04	11/01/12 22:52	7440-62-2	
Zinc	1670 ug/L		25.0	5	10/26/12 09:04	11/01/12 22:52	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	ND ug/L		20.0	5	10/26/12 09:01	11/05/12 23:15	7429-90-5	D3
Antimony, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-36-0	D3
Arsenic, Dissolved	3.0 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-38-2	
Barium, Dissolved	13.2 ug/L		1.5	5	10/26/12 09:01	11/05/12 23:15	7440-39-3	
Beryllium, Dissolved	ND ug/L		1.0	5	10/26/12 09:01	11/05/12 23:15	7440-41-7	D3
Cadmium, Dissolved	ND ug/L		0.40	5	10/26/12 09:01	11/05/12 23:15	7440-43-9	D3
Calcium, Dissolved	51000 ug/L		1000	50	10/26/12 09:01	11/05/12 23:20	7440-70-2	
Chromium, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-47-3	D3
Cobalt, Dissolved	5.7 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-48-4	
Copper, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-50-8	D3
Iron, Dissolved	5460 ug/L		250	5	10/26/12 09:01	11/05/12 23:15	7439-89-6	
Lead, Dissolved	1.1 ug/L		0.50	5	10/26/12 09:01	11/05/12 23:15	7439-92-1	
Magnesium, Dissolved	32000 ug/L		25.0	5	10/26/12 09:01	11/05/12 23:15	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: EB-1_20121017	Lab ID: 60131713018	Collected: 10/17/12 16:26	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	4600 ug/L		25.0	50	10/26/12 09:01	11/05/12 23:20	7439-96-5	
Molybdenum, Dissolved	13.5 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7439-98-7	
Nickel, Dissolved	7.8 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-02-0	
Potassium, Dissolved	6070 ug/L		100	5	10/26/12 09:01	11/05/12 23:15	7440-09-7	
Selenium, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7782-49-2	D3
Silver, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:15	7440-22-4	D3
Sodium, Dissolved	7210 ug/L		250	5	10/26/12 09:01	11/05/12 23:15	7440-23-5	
Thallium, Dissolved	ND ug/L		0.50	5	10/26/12 09:01	11/05/12 23:15	7440-28-0	D3
Vanadium, Dissolved	ND ug/L		0.50	5	10/26/12 09:01	11/05/12 23:15	7440-62-2	D3
Zinc, Dissolved	1510 ug/L		25.0	5	10/26/12 09:01	11/05/12 23:15	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	172 ug/L		100	2	10/26/12 08:30	11/07/12 13:37	7429-90-5	
Antimony, Dissolved	0.072J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-36-0	
Arsenic, Dissolved	5.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-38-2	
Barium, Dissolved	14.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-39-3	
Beryllium, Dissolved	0.17J ug/L		1.0	2	10/26/12 08:30	11/07/12 13:37	7440-41-7	
Cadmium, Dissolved	0.67 ug/L		0.50	1	10/26/12 08:30	10/31/12 19:57	7440-43-9	
Chromium, Dissolved	0.86J ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-47-3	
Cobalt, Dissolved	4.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-48-4	
Copper, Dissolved	9.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-50-8	
Iron, Dissolved	6460 ug/L		50.0	1	10/26/12 08:30	10/31/12 19:57	7439-89-6	
Lead, Dissolved	93.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7439-92-1	
Manganese, Dissolved	4290 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7439-96-5	
Molybdenum, Dissolved	13.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7439-98-7	
Nickel, Dissolved	2.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 19:57	7440-22-4	
Thallium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 19:57	7440-62-2	
Zinc, Dissolved	1220 ug/L		10.0	1	10/26/12 08:30	10/31/12 19:57	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:30	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:22	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:49	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	2120 umhos/cm		10.0	1			10/29/12 16:18	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	1350 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: EB-1_20121017	Lab ID: 60131713018	Collected: 10/17/12 16:26	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	1.1	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	185	mg/L	20.0	1		10/25/12 10:22		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:22		
Alkalinity, Total as CaCO3	185	mg/L	20.0	1		10/25/12 10:22		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1900	mg/L	5.0	1		10/24/12 15:33		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	22.0	mg/L	5.0	1		10/24/12 11:28		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/24/12 23:56	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.9	mg/L	1.0	1		10/29/12 01:56	16887-00-6	
Sulfate	1150	mg/L	100	100		10/29/12 14:35	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:58		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:15	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 19:46	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: EB-2_20121017	Lab ID: 60131713019	Collected: 10/18/12 09:47	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	316000 ug/L		1000	10	10/26/12 17:00	10/31/12 14:41	7440-70-2	
Magnesium, Dissolved	117000 ug/L		500	10	10/26/12 17:00	10/31/12 14:41	7439-95-4	
Potassium, Dissolved	12300 ug/L		5000	10	10/26/12 17:00	10/31/12 14:41	7440-09-7	
Sodium, Dissolved	6140 ug/L		5000	10	10/26/12 17:00	10/31/12 14:41	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	14000 ug/L		20.0	5	10/26/12 09:04	11/01/12 23:01	7429-90-5	
Antimony	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-36-0	D3
Arsenic	229 ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-38-2	
Barium	14.3 ug/L		1.5	5	10/26/12 09:04	11/01/12 23:01	7440-39-3	
Beryllium	6.1 ug/L		1.0	5	10/26/12 09:04	11/01/12 23:01	7440-41-7	
Cadmium	2.1 ug/L		0.40	5	10/26/12 09:04	11/01/12 23:01	7440-43-9	
Calcium	356000 ug/L		1000	50	10/26/12 09:04	11/01/12 23:05	7440-70-2	
Chromium	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-47-3	D3
Cobalt	58.4 ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-48-4	
Copper	32.2 ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-50-8	
Iron	530000 ug/L		2500	50	10/26/12 09:04	11/01/12 23:05	7439-89-6	
Lead	345 ug/L		0.50	5	10/26/12 09:04	11/01/12 23:01	7439-92-1	
Magnesium	129000 ug/L		50.0	10	10/26/12 09:04	11/05/12 21:11	7439-95-4	
Manganese	28200 ug/L		100	200	10/26/12 09:04	11/01/12 23:10	7439-96-5	
Molybdenum	ND ug/L		5.0	10	10/26/12 09:04	11/05/12 21:11	7439-98-7	D3
Nickel	85.4 ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-02-0	
Potassium	13800 ug/L		100	5	10/26/12 09:04	11/01/12 23:01	7440-09-7	
Selenium	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7782-49-2	D3
Silica	36900 ug/L		535	10	10/26/12 09:04	11/05/12 21:11	7631-86-9	
Silver	ND ug/L		2.5	5	10/26/12 09:04	11/01/12 23:01	7440-22-4	D3
Sodium	7030 ug/L		250	5	10/26/12 09:04	11/01/12 23:01	7440-23-5	
Thallium	ND ug/L		0.50	5	10/26/12 09:04	11/01/12 23:01	7440-28-0	D3
Total Hardness by 2340B	1420000 ug/L		3550	50	10/26/12 09:04	11/01/12 23:05		
Vanadium	0.72 ug/L		0.50	5	10/26/12 09:04	11/01/12 23:01	7440-62-2	
Zinc	43000 ug/L		1000	200	10/26/12 09:04	11/01/12 23:10	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	13900 ug/L		20.0	5	10/26/12 09:01	11/05/12 23:24	7429-90-5	
Antimony, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-36-0	D3
Arsenic, Dissolved	214 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-38-2	
Barium, Dissolved	11.1 ug/L		1.5	5	10/26/12 09:01	11/05/12 23:24	7440-39-3	
Beryllium, Dissolved	6.7 ug/L		1.0	5	10/26/12 09:01	11/05/12 23:24	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.40	5	10/26/12 09:01	11/05/12 23:24	7440-43-9	D3
Calcium, Dissolved	360000 ug/L		1000	50	10/26/12 09:01	11/05/12 23:28	7440-70-2	
Chromium, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-47-3	D3
Cobalt, Dissolved	61.1 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-48-4	
Copper, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-50-8	D3
Iron, Dissolved	526000 ug/L		2500	50	10/26/12 09:01	11/05/12 23:28	7439-89-6	
Lead, Dissolved	1.4 ug/L		0.50	5	10/26/12 09:01	11/05/12 23:24	7439-92-1	
Magnesium, Dissolved	133000 ug/L		250	50	10/26/12 09:01	11/05/12 23:28	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: EB-2_20121017	Lab ID: 60131713019	Collected: 10/18/12 09:47	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	27400 ug/L		100	200	10/26/12 09:01	11/05/12 23:32	7439-96-5	
Molybdenum, Dissolved	4.1 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7439-98-7	
Nickel, Dissolved	86.4 ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-02-0	
Potassium, Dissolved	14100 ug/L		100	5	10/26/12 09:01	11/05/12 23:24	7440-09-7	
Selenium, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7782-49-2	D3
Silver, Dissolved	ND ug/L		2.5	5	10/26/12 09:01	11/05/12 23:24	7440-22-4	D3
Sodium, Dissolved	7300 ug/L		250	5	10/26/12 09:01	11/05/12 23:24	7440-23-5	
Thallium, Dissolved	ND ug/L		0.50	5	10/26/12 09:01	11/05/12 23:24	7440-28-0	D3
Vanadium, Dissolved	ND ug/L		0.50	5	10/26/12 09:01	11/05/12 23:24	7440-62-2	D3
Zinc, Dissolved	44400 ug/L		1000	200	10/26/12 09:01	11/05/12 23:32	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	12100 ug/L		100	2	10/26/12 08:30	11/05/12 15:36	7429-90-5	
Antimony, Dissolved	ND ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-36-0	D3
Arsenic, Dissolved	204 ug/L		100	100	10/26/12 08:30	10/31/12 20:01	7440-38-2	
Barium, Dissolved	11.1 ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-39-3	
Beryllium, Dissolved	5.2 ug/L		1.0	2	10/26/12 08:30	11/05/12 15:36	7440-41-7	
Cadmium, Dissolved	0.51J ug/L		1.0	2	10/26/12 08:30	11/05/12 15:36	7440-43-9	
Chromium, Dissolved	0.57J ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-47-3	
Cobalt, Dissolved	28.6 ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-48-4	
Copper, Dissolved	9.5 ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-50-8	
Iron, Dissolved	468000 ug/L		5000	100	10/26/12 08:30	10/31/12 20:01	7439-89-6	
Lead, Dissolved	300 ug/L		100	100	10/26/12 08:30	10/31/12 20:01	7439-92-1	
Manganese, Dissolved	25400 ug/L		100	100	10/26/12 08:30	10/31/12 20:01	7439-96-5	
Molybdenum, Dissolved	2.2 ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7439-98-7	
Nickel, Dissolved	36.7 ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-02-0	
Selenium, Dissolved	ND ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7782-49-2	D3
Silver, Dissolved	ND ug/L		1.0	2	10/26/12 08:30	11/05/12 15:36	7440-22-4	D3
Thallium, Dissolved	0.19J ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-28-0	
Vanadium, Dissolved	ND ug/L		2.0	2	10/26/12 08:30	11/05/12 15:36	7440-62-2	D3
Zinc, Dissolved	40400 ug/L		1000	100	10/26/12 08:30	10/31/12 20:01	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:32	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:24	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:51	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	3040 umhos/cm		10.0	1			10/29/12 16:19	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	1940 mg/L		6.0	1			10/30/12 10:44	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: EB-2_20121017	Lab ID: 60131713019	Collected: 10/18/12 09:47	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	1.6	PSU	0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	68.6	mg/L	20.0	1		10/25/12 10:25		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:25		
Alkalinity, Total as CaCO3	68.6	mg/L	20.0	1		10/25/12 10:25		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	3580	mg/L	5.0	1		10/25/12 15:52		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	153	mg/L	5.0	1		10/25/12 10:33		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:45 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	4.0	mg/L	1.0	1		10/29/12 02:28 16887-00-6		
Sulfate	3370	mg/L	200	200		10/29/12 02:44 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 13:58		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:16 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/04/12 20:01 7440-44-0		

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-1 SHALLOW_20121017	Lab ID: 60131713020	Collected: 10/18/12 11:36	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	203000 ug/L		100	1	10/26/12 16:30	10/31/12 15:26	7440-70-2	
Magnesium, Dissolved	18200 ug/L		50.0	1	10/26/12 16:30	10/31/12 15:26	7439-95-4	
Potassium, Dissolved	1770 ug/L		500	1	10/26/12 16:30	10/31/12 15:26	7440-09-7	
Sodium, Dissolved	9740 ug/L		500	1	10/26/12 16:30	10/31/12 15:26	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	5900 ug/L		4.0	1	10/26/12 09:04	11/01/12 23:14	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-36-0	
Arsenic	5.2 ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-38-2	
Barium	91.5 ug/L		0.30	1	10/26/12 09:04	11/01/12 23:14	7440-39-3	
Beryllium	0.60 ug/L		0.20	1	10/26/12 09:04	11/01/12 23:14	7440-41-7	
Cadmium	1.1 ug/L		0.080	1	10/26/12 09:04	11/01/12 23:14	7440-43-9	
Calcium	256000 ug/L		400	20	10/26/12 09:04	11/01/12 23:19	7440-70-2	
Chromium	5.8 ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-47-3	
Cobalt	3.7 ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-48-4	
Copper	22.4 ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-50-8	
Iron	7550 ug/L		50.0	1	10/26/12 09:04	11/01/12 23:14	7439-89-6	
Lead	41.6 ug/L		0.10	1	10/26/12 09:04	11/01/12 23:14	7439-92-1	
Magnesium	24400 ug/L		25.0	5	10/26/12 09:04	11/05/12 21:16	7439-95-4	
Manganese	447 ug/L		2.5	5	10/26/12 09:04	11/05/12 21:16	7439-96-5	
Molybdenum	7.9 ug/L		2.5	5	10/26/12 09:04	11/05/12 21:16	7439-98-7	
Nickel	4.9 ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-02-0	
Potassium	2990 ug/L		20.0	1	10/26/12 09:04	11/01/12 23:14	7440-09-7	
Selenium	20.1 ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7782-49-2	
Silica	33300 ug/L		1070	20	10/26/12 09:04	11/01/12 23:19	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 09:04	11/01/12 23:14	7440-22-4	
Sodium	10700 ug/L		50.0	1	10/26/12 09:04	11/01/12 23:14	7440-23-5	
Thallium	0.21 ug/L		0.10	1	10/26/12 09:04	11/01/12 23:14	7440-28-0	
Total Hardness by 2340B	739000 ug/L		1420	20	10/26/12 09:04	11/01/12 23:19		
Vanadium	8.7 ug/L		0.10	1	10/26/12 09:04	11/01/12 23:14	7440-62-2	
Zinc	156 ug/L		5.0	1	10/26/12 09:04	11/01/12 23:14	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	31.3 ug/L		4.0	1	10/26/12 09:01	11/05/12 23:52	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-38-2	
Barium, Dissolved	19.1 ug/L		0.30	1	10/26/12 09:01	11/05/12 23:52	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 09:01	11/05/12 23:52	7440-41-7	
Cadmium, Dissolved	0.45 ug/L		0.080	1	10/26/12 09:01	11/05/12 23:52	7440-43-9	
Calcium, Dissolved	247000 ug/L		400	20	10/26/12 09:01	11/05/12 23:56	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-48-4	
Copper, Dissolved	0.79 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 09:01	11/05/12 23:52	7439-89-6	
Lead, Dissolved	0.29 ug/L		0.10	1	10/26/12 09:01	11/05/12 23:52	7439-92-1	
Magnesium, Dissolved	21000 ug/L		5.0	1	10/26/12 09:01	11/05/12 23:52	7439-95-4	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-1 SHALLOW_20121017	Lab ID: 60131713020	Collected: 10/18/12 11:36	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	4.3 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7439-96-5	
Molybdenum, Dissolved	7.6 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7439-98-7	
Nickel, Dissolved	2.5 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-02-0	
Potassium, Dissolved	1830 ug/L		20.0	1	10/26/12 09:01	11/05/12 23:52	7440-09-7	
Selenium, Dissolved	18.8 ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 09:01	11/05/12 23:52	7440-22-4	
Sodium, Dissolved	10800 ug/L		50.0	1	10/26/12 09:01	11/05/12 23:52	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 23:52	7440-28-0	B
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 09:01	11/05/12 23:52	7440-62-2	
Zinc, Dissolved	53.4 ug/L		5.0	1	10/26/12 09:01	11/05/12 23:52	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	1700 ug/L		50.0	1	10/26/12 08:30	11/07/12 10:57	7429-90-5	
Antimony, Dissolved	0.20J ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-36-0	
Arsenic, Dissolved	2.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-38-2	
Barium, Dissolved	38.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-39-3	
Beryllium, Dissolved	0.32J ug/L		0.50	1	10/26/12 08:30	11/07/12 10:57	7440-41-7	
Cadmium, Dissolved	1.1 ug/L		0.50	1	10/26/12 08:30	10/31/12 20:43	7440-43-9	
Chromium, Dissolved	2.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-47-3	
Cobalt, Dissolved	2.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-48-4	
Copper, Dissolved	12.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-50-8	
Iron, Dissolved	2270 ug/L		50.0	1	10/26/12 08:30	10/31/12 20:43	7439-89-6	
Lead, Dissolved	39.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7439-92-1	
Manganese, Dissolved	380 ug/L		1.0	1	10/26/12 08:30	11/07/12 10:57	7439-96-5	
Molybdenum, Dissolved	3.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7439-98-7	
Nickel, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-02-0	
Selenium, Dissolved	16.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7782-49-2	
Silver, Dissolved	0.47J ug/L		0.50	1	10/26/12 08:30	10/31/12 20:43	7440-22-4	
Thallium, Dissolved	0.091J ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-28-0	
Vanadium, Dissolved	2.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:43	7440-62-2	
Zinc, Dissolved	122 ug/L		10.0	1	10/26/12 08:30	10/31/12 20:43	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/26/12 08:11	11/07/12 14:34	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 08:15	11/07/12 11:27	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/25/12 16:40	10/27/12 15:53	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1280 umhos/cm		10.0	1			10/29/12 16:20	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-1 SHALLOW_20121017	Lab ID: 60131713020	Collected: 10/18/12 11:36	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	821 mg/L		6.0	1		10/30/12 10:44		
Salinity (as seawater)	0.64 PSU		0.010	1		10/30/12 10:44		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	81.9 mg/L		20.0	1		10/25/12 10:38		
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1		10/25/12 10:38		
Alkalinity, Total as CaCO3	81.9 mg/L		20.0	1		10/25/12 10:38		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1020 mg/L		5.0	1		10/25/12 15:52		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	216 mg/L		5.0	1		10/25/12 10:33		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1		10/25/12 22:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.4 mg/L		1.0	1		10/29/12 02:59	16887-00-6	
Sulfate	654 mg/L		50.0	50		10/29/12 03:47	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1		11/01/12 13:59		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1		10/24/12 15:26	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1		11/04/12 20:15	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-1 DEEP_20121017	Lab ID: 60131713021	Collected: 10/18/12 11:28	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	227000 ug/L		100	1	11/01/12 11:15	11/01/12 15:19	7440-70-2	M1
Magnesium, Dissolved	20200 ug/L		50.0	1	11/01/12 11:15	11/01/12 15:19	7439-95-4	
Potassium, Dissolved	2250 ug/L		500	1	11/03/12 12:30	11/05/12 12:12	7440-09-7	
Sodium, Dissolved	11800 ug/L		500	1	11/01/12 11:15	11/01/12 15:19	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	153 ug/L		4.0	1	11/07/12 13:01	11/08/12 13:55	7429-90-5	
Antimony	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-36-0	
Arsenic	0.61 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-38-2	
Barium	13.4 ug/L		0.30	1	11/07/12 13:01	11/08/12 13:55	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/07/12 13:01	11/08/12 13:55	7440-41-7	
Cadmium	2.0 ug/L		0.080	1	11/07/12 13:01	11/08/12 13:55	7440-43-9	
Calcium	240000 ug/L		400	20	11/07/12 13:01	11/08/12 13:59	7440-70-2	
Chromium	1.2 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-48-4	
Copper	3.4 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-50-8	
Iron	390 ug/L		50.0	1	11/07/12 13:01	11/08/12 13:55	7439-89-6	
Lead	4.5 ug/L		0.10	1	11/07/12 13:01	11/08/12 13:55	7439-92-1	
Magnesium	19800 ug/L		5.0	1	11/07/12 13:01	11/08/12 13:55	7439-95-4	
Manganese	16.9 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7439-96-5	
Molybdenum	9.1 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7439-98-7	
Nickel	0.69 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-02-0	
Potassium	2250 ug/L		20.0	1	11/07/12 13:01	11/08/12 13:55	7440-09-7	
Selenium	12.2 ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7782-49-2	
Silica	13400 ug/L		1070	20	11/07/12 13:01	11/08/12 13:59	7631-86-9	
Silver	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 13:55	7440-22-4	
Sodium	11200 ug/L		50.0	1	11/07/12 13:01	11/08/12 13:55	7440-23-5	
Thallium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 13:55	7440-28-0	B
Total Hardness by 2340B	681000 ug/L		1420	20	11/07/12 13:01	11/08/12 13:59		
Vanadium	0.38 ug/L		0.10	1	11/07/12 13:01	11/08/12 13:55	7440-62-2	
Zinc	788 ug/L		100	20	11/07/12 13:01	11/08/12 13:59	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	11.4 ug/L		4.0	1	10/26/12 12:58	11/06/12 03:35	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-38-2	
Barium, Dissolved	17.1 ug/L		0.30	1	10/26/12 12:58	11/06/12 03:35	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 12:58	11/06/12 03:35	7440-41-7	
Cadmium, Dissolved	2.0 ug/L		0.080	1	10/26/12 12:58	11/06/12 03:35	7440-43-9	
Calcium, Dissolved	249000 ug/L		400	20	10/26/12 12:58	11/06/12 16:51	7440-70-2	M6
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-48-4	
Copper, Dissolved	2.2 ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 12:58	11/06/12 03:35	7439-89-6	
Lead, Dissolved	0.42 ug/L		0.10	1	10/26/12 12:58	11/06/12 03:35	7439-92-1	
Magnesium, Dissolved	20400 ug/L		5.0	1	10/26/12 12:58	11/06/12 03:35	7439-95-4	M6

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-1 DEEP_20121017	Lab ID: 60131713021	Collected: 10/18/12 11:28	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	8.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7439-96-5	
Molybdenum, Dissolved	9.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7439-98-7	
Nickel, Dissolved	1.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-02-0	
Potassium, Dissolved	2260 ug/L		20.0	1	10/26/12 12:58	11/06/12 03:35	7440-09-7	
Selenium, Dissolved	12.9 ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:35	7440-22-4	
Sodium, Dissolved	12000 ug/L		50.0	1	10/26/12 12:58	11/06/12 03:35	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 03:35	7440-28-0	
Vanadium, Dissolved	0.16 ug/L		0.10	1	10/26/12 12:58	11/06/12 03:35	7440-62-2	
Zinc, Dissolved	754 ug/L		50.0	10	10/26/12 12:58	11/06/12 03:39	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	41.7J ug/L		50.0	1	10/26/12 08:30	11/07/12 11:01	7429-90-5	M1
Antimony, Dissolved	0.16J ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-36-0	M1
Arsenic, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-38-2	M1
Barium, Dissolved	16.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-39-3	M1
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/07/12 11:01	7440-41-7	M1
Cadmium, Dissolved	1.9 ug/L		0.50	1	10/26/12 08:30	10/31/12 20:47	7440-43-9	M1
Chromium, Dissolved	1.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-47-3	M1
Cobalt, Dissolved	0.11J ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-48-4	M1
Copper, Dissolved	3.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-50-8	M1
Iron, Dissolved	150 ug/L		50.0	1	10/26/12 08:30	10/31/12 20:47	7439-89-6	M1
Lead, Dissolved	4.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7439-92-1	M1
Manganese, Dissolved	29.4 ug/L		1.0	1	10/26/12 08:30	11/07/12 11:01	7439-96-5	M1
Molybdenum, Dissolved	8.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7439-98-7	M1
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-02-0	M1
Selenium, Dissolved	11.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7782-49-2	M1
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 20:47	7440-22-4	M1
Thallium, Dissolved	0.059J ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-28-0	M1
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 20:47	7440-62-2	M1
Zinc, Dissolved	624 ug/L		10.0	1	10/26/12 08:30	10/31/12 20:47	7440-66-6	M1
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 13:52	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:19	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:00	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1220 umhos/cm		10.0	1			10/29/12 16:31	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	781 mg/L		6.0	1			10/30/12 10:47	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-1 DEEP_20121017	Lab ID: 60131713021	Collected: 10/18/12 11:28	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.61	PSU	0.010	1			10/30/12 10:47	
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	83.3	mg/L	20.0	1			10/25/12 10:42	
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1			10/25/12 10:42	
Alkalinity, Total as CaCO3	83.3	mg/L	20.0	1			10/25/12 10:42	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	995	mg/L	5.0	1			10/25/12 15:52	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1			10/25/12 10:33	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1			10/25/12 22:46	18496-25-8
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.2	mg/L	1.0	1			10/28/12 13:38	16887-00-6
Sulfate	591	mg/L	50.0	50			10/29/12 12:55	14808-79-8
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1			11/01/12 14:04	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1			10/24/12 15:30	57-12-5
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1			11/05/12 09:40	7440-44-0

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-2 DEEP_20121017	Lab ID: 60131713022	Collected: 10/18/12 11:09	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	219000 ug/L		100	1	10/26/12 16:30	10/31/12 15:43	7440-70-2	
Magnesium, Dissolved	19300 ug/L		50.0	1	10/26/12 16:30	10/31/12 15:43	7439-95-4	
Potassium, Dissolved	1940 ug/L		500	1	10/26/12 16:30	10/31/12 15:43	7440-09-7	
Sodium, Dissolved	10700 ug/L		500	1	10/26/12 16:30	10/31/12 15:43	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	104 ug/L		4.0	1	11/07/12 13:01	11/08/12 14:03	7429-90-5	
Antimony	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-36-0	
Arsenic	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-38-2	
Barium	9.2 ug/L		0.30	1	11/07/12 13:01	11/08/12 14:03	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/07/12 13:01	11/08/12 14:03	7440-41-7	
Cadmium	0.97 ug/L		0.080	1	11/07/12 13:01	11/08/12 14:03	7440-43-9	
Calcium	250000 ug/L		400	20	11/07/12 13:01	11/08/12 14:08	7440-70-2	
Chromium	1.1 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-48-4	
Copper	1.2 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-50-8	B
Iron	236 ug/L		50.0	1	11/07/12 13:01	11/08/12 14:03	7439-89-6	
Lead	1.5 ug/L		0.10	1	11/07/12 13:01	11/08/12 14:03	7439-92-1	
Magnesium	21500 ug/L		5.0	1	11/07/12 13:01	11/08/12 14:03	7439-95-4	
Manganese	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7439-96-5	
Molybdenum	7.7 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7439-98-7	
Nickel	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-02-0	
Potassium	2050 ug/L		20.0	1	11/07/12 13:01	11/08/12 14:03	7440-09-7	
Selenium	0.89 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7782-49-2	
Silica	12100 ug/L		1070	20	11/07/12 13:01	11/08/12 14:08	7631-86-9	
Silver	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:03	7440-22-4	
Sodium	11200 ug/L		50.0	1	11/07/12 13:01	11/08/12 14:03	7440-23-5	
Thallium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 14:03	7440-28-0	B
Total Hardness by 2340B	712000 ug/L		1420	20	11/07/12 13:01	11/08/12 14:08		
Vanadium	0.20 ug/L		0.10	1	11/07/12 13:01	11/08/12 14:03	7440-62-2	
Zinc	22.6 ug/L		5.0	1	11/07/12 13:01	11/08/12 14:03	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.9 ug/L		4.0	1	10/26/12 12:58	11/06/12 03:54	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:54	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:54	7440-38-2	
Barium, Dissolved	14.2 ug/L		0.30	1	10/26/12 12:58	11/06/12 03:54	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 12:58	11/06/12 03:54	7440-41-7	
Cadmium, Dissolved	0.92 ug/L		0.080	1	10/26/12 12:58	11/06/12 03:54	7440-43-9	
Calcium, Dissolved	265000 ug/L		400	20	10/26/12 12:58	11/06/12 03:58	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:54	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 03:54	7440-48-4	
Copper, Dissolved	0.74 ug/L		0.50	1	10/26/12 12:58	11/06/12 03:54	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 12:58	11/06/12 03:54	7439-89-6	
Lead, Dissolved	0.10 ug/L		0.10	1	10/26/12 12:58	11/06/12 03:54	7439-92-1	B
Magnesium, Dissolved	22300 ug/L		5.0	1	10/26/12 12:58	11/06/12 03:54	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-2 DEEP_20121017	Lab ID: 60131713022	Collected: 10/18/12 11:09	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	4.5	ug/L	0.50	1	10/26/12 12:58	11/06/12 03:54	7439-96-5	
Molybdenum, Dissolved	7.3	ug/L	0.50	1	10/26/12 12:58	11/06/12 03:54	7439-98-7	
Nickel, Dissolved	2.1	ug/L	0.50	1	10/26/12 12:58	11/06/12 03:54	7440-02-0	
Potassium, Dissolved	2060	ug/L	20.0	1	10/26/12 12:58	11/06/12 03:54	7440-09-7	
Selenium, Dissolved	1.1	ug/L	0.50	1	10/26/12 12:58	11/06/12 03:54	7782-49-2	
Silver, Dissolved	ND	ug/L	0.50	1	10/26/12 12:58	11/06/12 03:54	7440-22-4	
Sodium, Dissolved	11800	ug/L	50.0	1	10/26/12 12:58	11/06/12 03:54	7440-23-5	
Thallium, Dissolved	ND	ug/L	0.10	1	10/26/12 12:58	11/06/12 03:54	7440-28-0	
Vanadium, Dissolved	ND	ug/L	0.10	1	10/26/12 12:58	11/06/12 03:54	7440-62-2	
Zinc, Dissolved	20.2	ug/L	5.0	1	10/26/12 12:58	11/06/12 03:54	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	29.3J	ug/L	50.0	1	10/26/12 08:30	11/07/12 11:13	7429-90-5	
Antimony, Dissolved	0.11J	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-36-0	
Arsenic, Dissolved	0.25J	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-38-2	
Barium, Dissolved	13.2	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-39-3	
Beryllium, Dissolved	ND	ug/L	0.50	1	10/26/12 08:30	11/07/12 11:13	7440-41-7	
Cadmium, Dissolved	0.85	ug/L	0.50	1	10/26/12 08:30	10/31/12 21:03	7440-43-9	
Chromium, Dissolved	1.1	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-47-3	
Cobalt, Dissolved	ND	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-48-4	
Copper, Dissolved	0.89J	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-50-8	
Iron, Dissolved	119	ug/L	50.0	1	10/26/12 08:30	10/31/12 21:03	7439-89-6	
Lead, Dissolved	1.4	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7439-92-1	
Manganese, Dissolved	10.3	ug/L	1.0	1	10/26/12 08:30	11/07/12 11:13	7439-96-5	
Molybdenum, Dissolved	7.6	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7439-98-7	
Nickel, Dissolved	ND	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-02-0	
Selenium, Dissolved	0.94J	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7782-49-2	
Silver, Dissolved	0.099J	ug/L	0.50	1	10/26/12 08:30	10/31/12 21:03	7440-22-4	
Thallium, Dissolved	0.13J	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-28-0	
Vanadium, Dissolved	ND	ug/L	1.0	1	10/26/12 08:30	10/31/12 21:03	7440-62-2	
Zinc, Dissolved	20.1	ug/L	10.0	1	10/26/12 08:30	10/31/12 21:03	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND	ug/L	0.20	1	10/31/12 15:13	11/01/12 13:55	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND	ug/L	0.20	1	10/26/12 00:00	11/07/12 13:21	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND	ug/L	0.20	1	10/26/12 16:45	10/27/12 16:02	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1290	umhos/cm	10.0	1			10/29/12 16:32	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	828	mg/L	6.0	1			10/30/12 10:47	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-2 DEEP_20121017	Lab ID: 60131713022	Collected: 10/18/12 11:09	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.64 PSU		0.010	1			10/30/12 10:47	
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	91.8 mg/L		20.0	1			10/25/12 10:45	
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1			10/25/12 10:45	
Alkalinity, Total as CaCO3	91.8 mg/L		20.0	1			10/25/12 10:45	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1020 mg/L		5.0	1			10/25/12 15:52	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND mg/L		5.0	1			10/25/12 10:34	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1			10/25/12 22:46	18496-25-8
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	ND mg/L		1.0	1			10/28/12 15:41	16887-00-6
Sulfate	606 mg/L		50.0	50			10/28/12 15:57	14808-79-8
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1			11/01/12 14:05	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1			10/24/12 15:32	57-12-5
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1			11/05/12 10:09	7440-44-0

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-3 DEEP_20121017	Lab ID: 60131713023	Collected: 10/18/12 09:26	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	209000 ug/L		100	1	10/26/12 16:30	10/31/12 15:47	7440-70-2	
Magnesium, Dissolved	20200 ug/L		50.0	1	10/26/12 16:30	10/31/12 15:47	7439-95-4	
Potassium, Dissolved	7720 ug/L		500	1	10/26/12 16:30	10/31/12 15:47	7440-09-7	
Sodium, Dissolved	10800 ug/L		500	1	10/26/12 16:30	10/31/12 15:47	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	218 ug/L		4.0	1	11/07/12 13:01	11/08/12 15:03	7429-90-5	
Antimony	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-36-0	
Arsenic	0.59 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-38-2	
Barium	15.4 ug/L		0.30	1	11/07/12 13:01	11/08/12 15:03	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/07/12 13:01	11/08/12 15:03	7440-41-7	
Cadmium	0.39 ug/L		0.080	1	11/07/12 13:01	11/08/12 15:03	7440-43-9	
Calcium	253000 ug/L		400	20	11/07/12 13:01	11/08/12 15:07	7440-70-2	
Chromium	0.62 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-47-3	
Cobalt	0.88 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-48-4	
Copper	2.1 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-50-8	
Iron	1100 ug/L		50.0	1	11/07/12 13:01	11/08/12 15:03	7439-89-6	
Lead	4.2 ug/L		0.10	1	11/07/12 13:01	11/08/12 15:03	7439-92-1	
Magnesium	25000 ug/L		100	20	11/07/12 13:01	11/08/12 15:07	7439-95-4	
Manganese	1200 ug/L		10.0	20	11/07/12 13:01	11/08/12 15:07	7439-96-5	
Molybdenum	12.1 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7439-98-7	
Nickel	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-02-0	
Potassium	8450 ug/L		20.0	1	11/07/12 13:01	11/08/12 15:03	7440-09-7	
Selenium	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7782-49-2	
Silica	13000 ug/L		1070	20	11/07/12 13:01	11/08/12 15:07	7631-86-9	
Silver	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:03	7440-22-4	
Sodium	11400 ug/L		50.0	1	11/07/12 13:01	11/08/12 15:03	7440-23-5	
Thallium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 15:03	7440-28-0	
Total Hardness by 2340B	736000 ug/L		1420	20	11/07/12 13:01	11/08/12 15:07		
Vanadium	0.49 ug/L		0.10	1	11/07/12 13:01	11/08/12 15:03	7440-62-2	
Zinc	61.8 ug/L		5.0	1	11/07/12 13:01	11/08/12 15:03	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	6.1 ug/L		4.0	1	10/26/12 12:58	11/06/12 04:02	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-38-2	
Barium, Dissolved	17.4 ug/L		0.30	1	10/26/12 12:58	11/06/12 04:02	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 12:58	11/06/12 04:02	7440-41-7	
Cadmium, Dissolved	0.083 ug/L		0.080	1	10/26/12 12:58	11/06/12 04:02	7440-43-9	
Calcium, Dissolved	247000 ug/L		400	20	10/26/12 12:58	11/06/12 04:06	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-47-3	
Cobalt, Dissolved	0.81 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-48-4	
Copper, Dissolved	0.92 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-50-8	
Iron, Dissolved	567 ug/L		50.0	1	10/26/12 12:58	11/06/12 04:02	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 04:02	7439-92-1	B
Magnesium, Dissolved	24400 ug/L		100	20	10/26/12 12:58	11/06/12 04:06	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-3 DEEP_20121017	Lab ID: 60131713023	Collected: 10/18/12 09:26	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1190 ug/L		10.0	20	10/26/12 12:58	11/06/12 04:06	7439-96-5	
Molybdenum, Dissolved	11.7 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7439-98-7	
Nickel, Dissolved	2.7 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-02-0	
Potassium, Dissolved	8380 ug/L		20.0	1	10/26/12 12:58	11/06/12 04:02	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:02	7440-22-4	
Sodium, Dissolved	11800 ug/L		50.0	1	10/26/12 12:58	11/06/12 04:02	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 04:02	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 04:02	7440-62-2	
Zinc, Dissolved	48.9 ug/L		5.0	1	10/26/12 12:58	11/06/12 04:02	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	57.3 ug/L		50.0	1	10/26/12 08:30	11/07/12 11:17	7429-90-5	
Antimony, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-36-0	
Arsenic, Dissolved	0.56J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-38-2	
Barium, Dissolved	16.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/07/12 11:17	7440-41-7	
Cadmium, Dissolved	0.28J ug/L		0.50	1	10/26/12 08:30	10/31/12 21:07	7440-43-9	
Chromium, Dissolved	1.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-47-3	
Cobalt, Dissolved	0.64J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-48-4	
Copper, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-50-8	
Iron, Dissolved	940 ug/L		50.0	1	10/26/12 08:30	10/31/12 21:07	7439-89-6	
Lead, Dissolved	3.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7439-92-1	
Manganese, Dissolved	1070 ug/L		1.0	1	10/26/12 08:30	11/07/12 11:17	7439-96-5	
Molybdenum, Dissolved	10.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7439-98-7	
Nickel, Dissolved	ND ug/L		5.0	5	10/26/12 08:30	11/08/12 14:03	7440-02-0	D3
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 21:07	7440-22-4	
Thallium, Dissolved	0.065J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-28-0	
Vanadium, Dissolved	0.28J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:07	7440-62-2	
Zinc, Dissolved	60.2 ug/L		10.0	1	10/26/12 08:30	10/31/12 21:07	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 13:57	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:29	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:04	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1320 umhos/cm		10.0	1			10/29/12 16:35	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	843 mg/L		6.0	1			10/30/12 10:47	

Date: 12/05/2012 04:36 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-3 DEEP_20121017	Lab ID: 60131713023	Collected: 10/18/12 09:26	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.66	PSU	0.010	1		10/30/12 10:47		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	85.7	mg/L	20.0	1		10/25/12 10:48		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 10:48		
Alkalinity, Total as CaCO3	85.7	mg/L	20.0	1		10/25/12 10:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1030	mg/L	5.0	1		10/25/12 15:53		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		10/25/12 10:34		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	5.8	mg/L	1.0	1		10/28/12 16:12	16887-00-6	
Sulfate	611	mg/L	50.0	50		10/28/12 16:28	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 14:07		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	0.0052	mg/L	0.0050	1		10/24/12 15:32	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/05/12 10:37	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-4 SHALLOW_20121017	Lab ID: 60131713024	Collected: 10/18/12 11:45	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	224000 ug/L		100	1	10/26/12 16:30	10/31/12 15:50	7440-70-2	
Magnesium, Dissolved	23100 ug/L		50.0	1	10/26/12 16:30	10/31/12 15:50	7439-95-4	
Potassium, Dissolved	2670 ug/L		500	1	10/26/12 16:30	10/31/12 15:50	7440-09-7	
Sodium, Dissolved	9790 ug/L		500	1	10/26/12 16:30	10/31/12 15:50	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	9530 ug/L		4.0	1	10/26/12 13:00	11/06/12 06:38	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-36-0	
Arsenic	4.8 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-38-2	
Barium	151 ug/L		0.30	1	10/26/12 13:00	11/06/12 06:38	7440-39-3	
Beryllium	0.95 ug/L		0.20	1	10/26/12 13:00	11/06/12 06:38	7440-41-7	
Cadmium	5.5 ug/L		0.080	1	10/26/12 13:00	11/06/12 06:38	7440-43-9	
Calcium	273000 ug/L		400	20	10/26/12 13:00	11/06/12 06:42	7440-70-2	
Chromium	6.6 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-47-3	
Cobalt	5.8 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-48-4	
Copper	21.0 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-50-8	
Iron	10500 ug/L		50.0	1	10/26/12 13:00	11/06/12 06:38	7439-89-6	
Lead	35.3 ug/L		0.10	1	10/26/12 13:00	11/06/12 06:38	7439-92-1	
Magnesium	29200 ug/L		100	20	10/26/12 13:00	11/06/12 06:42	7439-95-4	
Manganese	466 ug/L		10.0	20	10/26/12 13:00	11/06/12 06:42	7439-96-5	
Molybdenum	1.6 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7439-98-7	
Nickel	7.0 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-02-0	
Potassium	4950 ug/L		20.0	1	10/26/12 13:00	11/06/12 06:38	7440-09-7	
Selenium	11.4 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7782-49-2	
Silica	49700 ug/L		1070	20	10/26/12 13:00	11/06/12 06:42	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 13:00	11/06/12 06:38	7440-22-4	
Sodium	10800 ug/L		50.0	1	10/26/12 13:00	11/06/12 06:38	7440-23-5	
Thallium	0.25 ug/L		0.10	1	10/26/12 13:00	11/06/12 06:38	7440-28-0	
Total Hardness by 2340B	803000 ug/L		1420	20	10/26/12 13:00	11/06/12 06:42		
Vanadium	12.0 ug/L		0.10	1	10/26/12 13:00	11/06/12 06:38	7440-62-2	
Zinc	629 ug/L		100	20	10/26/12 13:00	11/06/12 06:42	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	62.6 ug/L		4.0	1	10/26/12 12:58	11/06/12 04:31	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-38-2	
Barium, Dissolved	24.5 ug/L		0.30	1	10/26/12 12:58	11/06/12 04:31	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 12:58	11/06/12 04:31	7440-41-7	
Cadmium, Dissolved	4.3 ug/L		0.080	1	10/26/12 12:58	11/06/12 04:31	7440-43-9	
Calcium, Dissolved	280000 ug/L		400	20	10/26/12 12:58	11/06/12 04:35	7440-70-2	
Chromium, Dissolved	0.82 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-48-4	
Copper, Dissolved	1.0 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 12:58	11/06/12 04:31	7439-89-6	
Lead, Dissolved	0.11 ug/L		0.10	1	10/26/12 12:58	11/06/12 04:31	7439-92-1	B
Magnesium, Dissolved	28400 ug/L		100	20	10/26/12 12:58	11/06/12 04:35	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-4 SHALLOW_20121017	Lab ID: 60131713024	Collected: 10/18/12 11:45	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	7.5 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7439-96-5	
Molybdenum, Dissolved	0.67 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7439-98-7	
Nickel, Dissolved	3.8 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-02-0	
Potassium, Dissolved	2620 ug/L		20.0	1	10/26/12 12:58	11/06/12 04:31	7440-09-7	
Selenium, Dissolved	9.8 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:31	7440-22-4	
Sodium, Dissolved	10700 ug/L		50.0	1	10/26/12 12:58	11/06/12 04:31	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 04:31	7440-28-0	
Vanadium, Dissolved	0.11 ug/L		0.10	1	10/26/12 12:58	11/06/12 04:31	7440-62-2	
Zinc, Dissolved	482 ug/L		100	20	10/26/12 12:58	11/06/12 04:35	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	2010 ug/L		50.0	1	10/26/12 08:30	11/07/12 11:21	7429-90-5	
Antimony, Dissolved	0.13J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-36-0	
Arsenic, Dissolved	1.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-38-2	
Barium, Dissolved	40.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-39-3	
Beryllium, Dissolved	0.54 ug/L		0.50	1	10/26/12 08:30	11/07/12 11:21	7440-41-7	
Cadmium, Dissolved	5.1 ug/L		0.50	1	10/26/12 08:30	10/31/12 21:12	7440-43-9	
Chromium, Dissolved	2.1 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-47-3	
Cobalt, Dissolved	3.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-48-4	
Copper, Dissolved	12.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-50-8	
Iron, Dissolved	2190 ug/L		50.0	1	10/26/12 08:30	10/31/12 21:12	7439-89-6	
Lead, Dissolved	32.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7439-92-1	
Manganese, Dissolved	392 ug/L		1.0	1	10/26/12 08:30	11/07/12 11:21	7439-96-5	
Molybdenum, Dissolved	0.38J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7439-98-7	
Nickel, Dissolved	1.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-02-0	
Selenium, Dissolved	8.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7782-49-2	
Silver, Dissolved	0.13J ug/L		0.50	1	10/26/12 08:30	10/31/12 21:12	7440-22-4	
Thallium, Dissolved	0.068J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-28-0	
Vanadium, Dissolved	2.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:12	7440-62-2	
Zinc, Dissolved	445 ug/L		10.0	1	10/26/12 08:30	10/31/12 21:12	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 14:11	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:36	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:11	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1370 umhos/cm		10.0	1			10/29/12 16:35	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-4 SHALLOW_20121017	Lab ID: 60131713024	Collected: 10/18/12 11:45	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	879 mg/L		6.0	1		10/30/12 10:47		
Salinity (as seawater)	0.69 PSU		0.010	1		10/30/12 10:47		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	95.4 mg/L		20.0	1		10/25/12 11:01		
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1		10/25/12 11:01		
Alkalinity, Total as CaCO3	95.4 mg/L		20.0	1		10/25/12 11:01		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1120 mg/L		5.0	1		10/25/12 15:53		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	448 mg/L		5.0	1		10/25/12 10:35		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1		10/25/12 22:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.2 mg/L		1.0	1		10/28/12 16:43	16887-00-6	
Sulfate	643 mg/L		50.0	50		10/28/12 16:58	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	0.67 mg/L		0.10	1		11/01/12 14:08		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	0.0073 mg/L		0.0050	1		10/24/12 15:35	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	1.2 mg/L		1.0	1		11/05/12 11:19	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-4 DEEP_20121017	Lab ID: 60131713025	Collected: 10/18/12 11:55	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	233000 ug/L		100	1	10/26/12 16:30	10/31/12 16:01	7440-70-2	M1
Magnesium, Dissolved	23700 ug/L		50.0	1	10/26/12 16:30	10/31/12 16:01	7439-95-4	M1
Potassium, Dissolved	2390 ug/L		500	1	10/26/12 16:30	10/31/12 16:01	7440-09-7	M1
Sodium, Dissolved	10400 ug/L		500	1	10/26/12 16:30	10/31/12 16:01	7440-23-5	M1
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	53.9 ug/L		4.0	1	11/07/12 13:01	11/08/12 14:46	7429-90-5	
Antimony	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-36-0	
Arsenic	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-38-2	
Barium	8.6 ug/L		0.30	1	11/07/12 13:01	11/08/12 14:46	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/07/12 13:01	11/08/12 14:46	7440-41-7	
Cadmium	1.6 ug/L		0.080	1	11/07/12 13:01	11/08/12 14:46	7440-43-9	
Calcium	258000 ug/L		400	20	11/07/12 13:01	11/08/12 14:50	7440-70-2	
Chromium	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-48-4	
Copper	1.8 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-50-8	B
Iron	115 ug/L		50.0	1	11/07/12 13:01	11/08/12 14:46	7439-89-6	
Lead	0.91 ug/L		0.10	1	11/07/12 13:01	11/08/12 14:46	7439-92-1	
Magnesium	26800 ug/L		100	20	11/07/12 13:01	11/08/12 14:50	7439-95-4	
Manganese	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7439-96-5	
Molybdenum	0.91 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7439-98-7	
Nickel	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-02-0	
Potassium	2450 ug/L		20.0	1	11/07/12 13:01	11/08/12 14:46	7440-09-7	
Selenium	6.9 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7782-49-2	
Silica	9860 ug/L		1070	20	11/07/12 13:01	11/08/12 14:50	7631-86-9	
Silver	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:46	7440-22-4	
Sodium	10500 ug/L		50.0	1	11/07/12 13:01	11/08/12 14:46	7440-23-5	
Thallium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 14:46	7440-28-0	B
Total Hardness by 2340B	754000 ug/L		1420	20	11/07/12 13:01	11/08/12 14:50		
Vanadium	0.12 ug/L		0.10	1	11/07/12 13:01	11/08/12 14:46	7440-62-2	
Zinc	203 ug/L		5.0	1	11/07/12 13:01	11/08/12 14:46	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	15.4 ug/L		4.0	1	10/26/12 12:58	11/06/12 04:39	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-38-2	
Barium, Dissolved	14.6 ug/L		0.30	1	10/26/12 12:58	11/06/12 04:39	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	10/26/12 12:58	11/06/12 04:39	7440-41-7	
Cadmium, Dissolved	1.7 ug/L		0.080	1	10/26/12 12:58	11/06/12 04:39	7440-43-9	
Calcium, Dissolved	264000 ug/L		400	20	10/26/12 12:58	11/06/12 04:43	7440-70-2	
Chromium, Dissolved	0.65 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-48-4	
Copper, Dissolved	2.3 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	10/26/12 12:58	11/06/12 04:39	7439-89-6	
Lead, Dissolved	0.12 ug/L		0.10	1	10/26/12 12:58	11/06/12 04:39	7439-92-1	B
Magnesium, Dissolved	26900 ug/L		100	20	10/26/12 12:58	11/06/12 04:43	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-4 DEEP_20121017	Lab ID: 60131713025	Collected: 10/18/12 11:55	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	1.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7439-96-5	
Molybdenum, Dissolved	0.87 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7439-98-7	
Nickel, Dissolved	1.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-02-0	
Potassium, Dissolved	2480 ug/L		20.0	1	10/26/12 12:58	11/06/12 04:39	7440-09-7	
Selenium, Dissolved	7.0 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:39	7440-22-4	
Sodium, Dissolved	11000 ug/L		50.0	1	10/26/12 12:58	11/06/12 04:39	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 04:39	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 04:39	7440-62-2	
Zinc, Dissolved	212 ug/L		5.0	1	10/26/12 12:58	11/06/12 04:39	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	26.8J ug/L		50.0	1	10/26/12 08:30	11/07/12 11:25	7429-90-5	
Antimony, Dissolved	0.048J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-36-0	
Arsenic, Dissolved	0.41J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-38-2	
Barium, Dissolved	13.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	11/07/12 11:25	7440-41-7	
Cadmium, Dissolved	1.4 ug/L		0.50	1	10/26/12 08:30	10/31/12 21:24	7440-43-9	
Chromium, Dissolved	0.56J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-47-3	
Cobalt, Dissolved	0.056J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-48-4	
Copper, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-50-8	
Iron, Dissolved	53.4 ug/L		50.0	1	10/26/12 08:30	10/31/12 21:24	7439-89-6	
Lead, Dissolved	0.80J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7439-92-1	
Manganese, Dissolved	7.5 ug/L		1.0	1	10/26/12 08:30	11/07/12 11:25	7439-96-5	
Molybdenum, Dissolved	0.76J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7439-98-7	
Nickel, Dissolved	ND ug/L		5.0	5	10/26/12 08:30	11/08/12 18:43	7440-02-0	D3
Selenium, Dissolved	6.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 21:24	7440-22-4	
Thallium, Dissolved	0.038J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:24	7440-62-2	
Zinc, Dissolved	168 ug/L		10.0	1	10/26/12 08:30	10/31/12 21:24	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 14:14	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:38	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:18	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1330 umhos/cm		10.0	1			10/29/12 16:36	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	849 mg/L		6.0	1			10/30/12 10:47	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-4 DEEP_20121017	Lab ID: 60131713025	Collected: 10/18/12 11:55	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.66	PSU	0.010	1			10/30/12 10:47	
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	70.7	mg/L	20.0	1			10/25/12 11:08	
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1			10/25/12 11:08	
Alkalinity, Total as CaCO3	70.7	mg/L	20.0	1			10/25/12 11:08	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1090	mg/L	5.0	1			10/25/12 15:53	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1			10/25/12 10:35	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1			10/25/12 22:47	18496-25-8
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.3	mg/L	1.0	1			10/28/12 17:14	16887-00-6
Sulfate	638	mg/L	50.0	50			10/28/12 18:00	14808-79-8
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1			11/01/12 14:09	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1			10/24/12 15:35	57-12-5
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1			11/05/12 11:33	7440-44-0

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-5 SHALLOW_20121017	Lab ID: 60131713026	Collected: 10/18/12 10:16	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	418000 ug/L		500	5	10/26/12 16:30	10/31/12 16:08	7440-70-2	
Magnesium, Dissolved	83200 ug/L		250	5	10/26/12 16:30	10/31/12 16:08	7439-95-4	
Potassium, Dissolved	1870J ug/L		2500	5	10/26/12 16:30	10/31/12 16:08	7440-09-7	
Sodium, Dissolved	10800 ug/L		2500	5	10/26/12 16:30	10/31/12 16:08	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	45500 ug/L		80.0	20	10/26/12 13:00	11/06/12 07:00	7429-90-5	
Antimony	2.7 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7440-36-0	
Arsenic	284 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7440-38-2	
Barium	211 ug/L		0.30	1	10/26/12 13:00	11/06/12 06:55	7440-39-3	
Beryllium	9.7 ug/L		0.20	1	10/26/12 13:00	11/06/12 06:55	7440-41-7	
Cadmium	204 ug/L		0.080	1	10/26/12 13:00	11/06/12 06:55	7440-43-9	
Calcium	503000 ug/L		2000	100	10/26/12 13:00	11/06/12 07:05	7440-70-2	
Chromium	18.3 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7440-47-3	
Cobalt	73.9 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7440-48-4	
Copper	1030 ug/L		10.0	20	10/26/12 13:00	11/06/12 07:00	7440-50-8	
Iron	423000 ug/L		1000	20	10/26/12 13:00	11/06/12 07:00	7439-89-6	
Lead	6480 ug/L		2.0	20	10/26/12 13:00	11/06/12 07:00	7439-92-1	
Magnesium	100000 ug/L		100	20	10/26/12 13:00	11/06/12 07:00	7439-95-4	
Manganese	18100 ug/L		50.0	100	10/26/12 13:00	11/06/12 07:05	7439-96-5	
Molybdenum	5.5 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7439-98-7	
Nickel	128 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7440-02-0	
Potassium	4730 ug/L		20.0	1	10/26/12 13:00	11/06/12 06:55	7440-09-7	
Selenium	8.9 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7782-49-2	
Silica	122000 ug/L		5350	100	10/26/12 13:00	11/06/12 07:05	7631-86-9	
Silver	22.4 ug/L		0.50	1	10/26/12 13:00	11/06/12 06:55	7440-22-4	
Sodium	11500 ug/L		50.0	1	10/26/12 13:00	11/06/12 06:55	7440-23-5	
Thallium	0.93 ug/L		0.10	1	10/26/12 13:00	11/06/12 06:55	7440-28-0	
Total Hardness by 2340B	1670000 ug/L		7100	100	10/26/12 13:00	11/06/12 07:05		
Vanadium	19.3 ug/L		0.10	1	10/26/12 13:00	11/06/12 06:55	7440-62-2	
Zinc	78200 ug/L		1000	200	10/26/12 13:00	11/06/12 17:04	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	33400 ug/L		80.0	20	10/26/12 12:58	11/06/12 04:52	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-36-0	
Arsenic, Dissolved	216 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-38-2	
Barium, Dissolved	11.6 ug/L		0.30	1	10/26/12 12:58	11/06/12 04:48	7440-39-3	
Beryllium, Dissolved	8.0 ug/L		0.20	1	10/26/12 12:58	11/06/12 04:48	7440-41-7	
Cadmium, Dissolved	167 ug/L		0.080	1	10/26/12 12:58	11/06/12 04:48	7440-43-9	
Calcium, Dissolved	501000 ug/L		2000	100	10/26/12 12:58	11/06/12 04:56	7440-70-2	
Chromium, Dissolved	3.0 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-47-3	
Cobalt, Dissolved	69.2 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-48-4	
Copper, Dissolved	18.2 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-50-8	
Iron, Dissolved	383000 ug/L		1000	20	10/26/12 12:58	11/06/12 04:52	7439-89-6	
Lead, Dissolved	1160 ug/L		2.0	20	10/26/12 12:58	11/06/12 04:52	7439-92-1	
Magnesium, Dissolved	101000 ug/L		100	20	10/26/12 12:58	11/06/12 04:52	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-5 SHALLOW_20121017	Lab ID: 60131713026	Collected: 10/18/12 10:16	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	17700 ug/L		50.0	100	10/26/12 12:58	11/06/12 04:56	7439-96-5	
Molybdenum, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7439-98-7	
Nickel, Dissolved	125 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-02-0	
Potassium, Dissolved	1840 ug/L		20.0	1	10/26/12 12:58	11/06/12 04:48	7440-09-7	
Selenium, Dissolved	6.7 ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 04:48	7440-22-4	
Sodium, Dissolved	11400 ug/L		50.0	1	10/26/12 12:58	11/06/12 04:48	7440-23-5	
Thallium, Dissolved	0.27 ug/L		0.10	1	10/26/12 12:58	11/06/12 04:48	7440-28-0	
Vanadium, Dissolved	2.9 ug/L		0.10	1	10/26/12 12:58	11/06/12 04:48	7440-62-2	
Zinc, Dissolved	74700 ug/L		1000	200	10/26/12 12:58	11/06/12 16:55	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	32500 ug/L		250	5	10/26/12 08:30	11/07/12 11:52	7429-90-5	M1
Antimony, Dissolved	0.44J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-36-0	M1
Arsenic, Dissolved	220 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-38-2	M1
Barium, Dissolved	8.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-39-3	M1
Beryllium, Dissolved	7.4 ug/L		2.5	5	10/26/12 08:30	11/07/12 11:52	7440-41-7	M1
Cadmium, Dissolved	174 ug/L		0.50	1	10/26/12 08:30	10/31/12 21:28	7440-43-9	M1
Chromium, Dissolved	7.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-47-3	M1
Cobalt, Dissolved	61.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-48-4	M1
Copper, Dissolved	313 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-50-8	M1
Iron, Dissolved	360000 ug/L		250	5	10/26/12 08:30	11/07/12 11:52	7439-89-6	M1
Lead, Dissolved	4190 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7439-92-1	M1
Manganese, Dissolved	17200 ug/L		5.0	5	10/26/12 08:30	11/07/12 11:52	7439-96-5	M1
Molybdenum, Dissolved	1.2 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7439-98-7	M1
Nickel, Dissolved	103 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-02-0	M1
Selenium, Dissolved	3.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7782-49-2	M1
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 21:28	7440-22-4	M1
Thallium, Dissolved	0.51J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-28-0	M1
Vanadium, Dissolved	5.9 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:28	7440-62-2	M1
Zinc, Dissolved	62800 ug/L		50.0	5	10/26/12 08:30	11/07/12 11:52	7440-66-6	M1
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 14:16	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:41	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:20	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	3640 umhos/cm		10.0	1			10/29/12 16:38	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-5 SHALLOW_20121017	Lab ID: 60131713026	Collected: 10/18/12 10:16	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	2330 mg/L		6.0	1		10/30/12 10:47		
Salinity (as seawater)	1.9 PSU		0.010	1		10/30/12 10:47		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 11:09		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/25/12 11:09		
Alkalinity, Total as CaCO3	ND	mg/L	20.0	1		10/25/12 11:09		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	3730 mg/L		5.0	1		10/25/12 15:54		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	930 mg/L		5.0	1		10/25/12 10:35		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.6 mg/L		1.0	1		10/29/12 13:41	16887-00-6	
Sulfate	4560 mg/L		500	500		10/29/12 14:28	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 14:10		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:36	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	1.6 mg/L		1.0	1		11/05/12 11:48	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-5 DEEP_20121017	Lab ID: 60131713027	Collected: 10/18/12 10:37	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	294000 ug/L		100	1	10/26/12 16:30	10/31/12 16:11	7440-70-2	
Magnesium, Dissolved	61200 ug/L		50.0	1	10/26/12 16:30	10/31/12 16:11	7439-95-4	
Potassium, Dissolved	9570 ug/L		500	1	10/26/12 16:30	10/31/12 16:11	7440-09-7	
Sodium, Dissolved	7120 ug/L		500	1	10/26/12 16:30	10/31/12 16:11	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	878 ug/L		4.0	1	11/07/12 13:01	11/08/12 14:54	7429-90-5	
Antimony	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-36-0	
Arsenic	188 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-38-2	
Barium	3.7 ug/L		0.30	1	11/07/12 13:01	11/08/12 14:54	7440-39-3	
Beryllium	2.6 ug/L		0.20	1	11/07/12 13:01	11/08/12 14:54	7440-41-7	
Cadmium	0.24 ug/L		0.080	1	11/07/12 13:01	11/08/12 14:54	7440-43-9	B
Calcium	329000 ug/L		400	20	11/07/12 13:01	11/08/12 14:58	7440-70-2	
Chromium	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-47-3	
Cobalt	11.1 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-48-4	
Copper	1.8 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-50-8	B
Iron	92800 ug/L		1000	20	11/07/12 13:01	11/08/12 14:58	7439-89-6	
Lead	4.5 ug/L		0.10	1	11/07/12 13:01	11/08/12 14:54	7439-92-1	
Magnesium	64300 ug/L		100	20	11/07/12 13:01	11/08/12 14:58	7439-95-4	
Manganese	13000 ug/L		25.0	50	11/07/12 13:01	11/12/12 12:20	7439-96-5	
Molybdenum	15.0 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7439-98-7	
Nickel	11.0 ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-02-0	
Potassium	9360 ug/L		20.0	1	11/07/12 13:01	11/08/12 14:54	7440-09-7	
Selenium	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7782-49-2	
Silica	24700 ug/L		1070	20	11/07/12 13:01	11/08/12 14:58	7631-86-9	
Silver	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 14:54	7440-22-4	
Sodium	6810 ug/L		50.0	1	11/07/12 13:01	11/08/12 14:54	7440-23-5	
Thallium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 14:54	7440-28-0	B
Total Hardness by 2340B	1090000 ug/L		1420	20	11/07/12 13:01	11/08/12 14:58		
Vanadium	0.12 ug/L		0.10	1	11/07/12 13:01	11/08/12 14:54	7440-62-2	
Zinc	11600 ug/L		250	50	11/07/12 13:01	11/12/12 12:20	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	863 ug/L		4.0	1	10/26/12 12:58	11/06/12 05:00	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-36-0	
Arsenic, Dissolved	170 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-38-2	
Barium, Dissolved	12.8 ug/L		0.30	1	10/26/12 12:58	11/06/12 05:00	7440-39-3	
Beryllium, Dissolved	2.8 ug/L		0.20	1	10/26/12 12:58	11/06/12 05:00	7440-41-7	
Cadmium, Dissolved	0.17 ug/L		0.080	1	10/26/12 12:58	11/06/12 05:00	7440-43-9	
Calcium, Dissolved	344000 ug/L		400	20	10/26/12 12:58	11/06/12 05:04	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-47-3	
Cobalt, Dissolved	11.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-48-4	
Copper, Dissolved	0.88 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-50-8	
Iron, Dissolved	96300 ug/L		1000	20	10/26/12 12:58	11/06/12 05:04	7439-89-6	
Lead, Dissolved	0.26 ug/L		0.10	1	10/26/12 12:58	11/06/12 05:00	7439-92-1	
Magnesium, Dissolved	67400 ug/L		100	20	10/26/12 12:58	11/06/12 05:04	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-5 DEEP_20121017	Lab ID: 60131713027	Collected: 10/18/12 10:37	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	13700 ug/L		50.0	100	10/26/12 12:58	11/06/12 05:08	7439-96-5	
Molybdenum, Dissolved	14.6 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7439-98-7	
Nickel, Dissolved	12.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-02-0	
Potassium, Dissolved	9560 ug/L		20.0	1	10/26/12 12:58	11/06/12 05:00	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:00	7440-22-4	
Sodium, Dissolved	7290 ug/L		50.0	1	10/26/12 12:58	11/06/12 05:00	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 05:00	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 05:00	7440-62-2	
Zinc, Dissolved	12500 ug/L		500	100	10/26/12 12:58	11/06/12 05:08	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	787 ug/L		100	2	10/26/12 08:30	11/07/12 12:00	7429-90-5	
Antimony, Dissolved	0.065J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-36-0	
Arsenic, Dissolved	157 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-38-2	
Barium, Dissolved	12.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-39-3	
Beryllium, Dissolved	2.1 ug/L		1.0	2	10/26/12 08:30	11/07/12 12:00	7440-41-7	
Cadmium, Dissolved	0.22J ug/L		0.50	1	10/26/12 08:30	10/31/12 21:36	7440-43-9	
Chromium, Dissolved	0.52J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-47-3	
Cobalt, Dissolved	9.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-48-4	
Copper, Dissolved	1.5J ug/L		2.0	2	10/26/12 08:30	11/07/12 12:00	7440-50-8	
Iron, Dissolved	79900 ug/L		50.0	1	10/26/12 08:30	10/31/12 21:36	7439-89-6	
Lead, Dissolved	4.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7439-92-1	
Manganese, Dissolved	12300 ug/L		20.0	20	10/26/12 08:30	11/08/12 14:11	7439-96-5	
Molybdenum, Dissolved	14.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7439-98-7	
Nickel, Dissolved	6.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7782-49-2	
Silver, Dissolved	0.088J ug/L		0.50	1	10/26/12 08:30	10/31/12 21:36	7440-22-4	
Thallium, Dissolved	0.10J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:36	7440-62-2	
Zinc, Dissolved	8670 ug/L		10.0	1	10/26/12 08:30	10/31/12 21:36	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 14:19	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:43	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:22	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1890 umhos/cm		10.0	1			10/29/12 16:39	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	1210 mg/L		6.0	1			10/30/12 10:47	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-5 DEEP_20121017	Lab ID: 60131713027	Collected: 10/18/12 10:37	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.96 PSU		0.010	1			10/30/12 10:47	
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	56.9 mg/L		20.0	1			10/26/12 09:46	
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1			10/26/12 09:46	
Alkalinity, Total as CaCO3	56.9 mg/L		20.0	1			10/26/12 09:46	
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1760 mg/L		5.0	1			10/25/12 15:54	
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	48.0 mg/L		5.0	1			10/25/12 10:35	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1			10/25/12 22:48	18496-25-8
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.3 mg/L		1.0	1			10/29/12 14:43	16887-00-6
Sulfate	1280 mg/L		100	100			10/28/12 19:02	14808-79-8
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1			11/01/12 14:12	
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1			10/24/12 15:36	57-12-5
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1			11/05/12 12:02	7440-44-0

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-6 SHALLOW_20121017	Lab ID: 60131713028	Collected: 10/18/12 11:01	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	211000 ug/L		100	1	10/26/12 16:30	10/31/12 16:15	7440-70-2	
Magnesium, Dissolved	29100 ug/L		50.0	1	10/26/12 16:30	10/31/12 16:15	7439-95-4	
Potassium, Dissolved	4260 ug/L		500	1	10/26/12 16:30	10/31/12 16:15	7440-09-7	
Sodium, Dissolved	4920 ug/L		500	1	10/26/12 16:30	10/31/12 16:15	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	184 ug/L		4.0	1	11/07/12 13:01	11/08/12 15:31	7429-90-5	
Antimony	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-36-0	
Arsenic	3.8 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-38-2	
Barium	13.4 ug/L		0.30	1	11/07/12 13:01	11/08/12 15:31	7440-39-3	
Beryllium	0.38 ug/L		0.20	1	11/07/12 13:01	11/08/12 15:31	7440-41-7	
Cadmium	0.29 ug/L		0.080	1	11/07/12 13:01	11/08/12 15:31	7440-43-9	
Calcium	238000 ug/L		1000	50	11/07/12 13:01	11/12/12 12:25	7440-70-2	M6
Chromium	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-47-3	
Cobalt	2.4 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-48-4	
Copper	1.9 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-50-8	B
Iron	6030 ug/L		50.0	1	11/07/12 13:01	11/08/12 15:31	7439-89-6	M6
Lead	1.7 ug/L		0.10	1	11/07/12 13:01	11/08/12 15:31	7439-92-1	
Magnesium	31900 ug/L		25.0	5	11/07/12 13:01	11/08/12 15:35	7439-95-4	M6
Manganese	5360 ug/L		25.0	50	11/07/12 13:01	11/12/12 12:25	7439-96-5	M6
Molybdenum	4.9 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7439-98-7	
Nickel	2.5 ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-02-0	
Potassium	4580 ug/L		20.0	1	11/07/12 13:01	11/08/12 15:31	7440-09-7	M6
Selenium	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7782-49-2	
Silica	13700 ug/L		268	5	11/07/12 13:01	11/08/12 15:35	7631-86-9	
Silver	ND ug/L		0.50	1	11/07/12 13:01	11/08/12 15:31	7440-22-4	
Sodium	5120 ug/L		50.0	1	11/07/12 13:01	11/08/12 15:31	7440-23-5	M6
Thallium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 15:31	7440-28-0	
Total Hardness by 2340B	726000 ug/L		3550	50	11/07/12 13:01	11/12/12 12:25		
Vanadium	ND ug/L		0.10	1	11/07/12 13:01	11/08/12 15:31	7440-62-2	
Zinc	601 ug/L		25.0	5	11/07/12 13:01	11/08/12 15:35	7440-66-6	M6
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	154 ug/L		4.0	1	10/26/12 12:58	11/06/12 05:27	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-36-0	
Arsenic, Dissolved	1.9 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-38-2	
Barium, Dissolved	18.0 ug/L		0.30	1	10/26/12 12:58	11/06/12 05:27	7440-39-3	
Beryllium, Dissolved	0.43 ug/L		0.20	1	10/26/12 12:58	11/06/12 05:27	7440-41-7	
Cadmium, Dissolved	0.25 ug/L		0.080	1	10/26/12 12:58	11/06/12 05:27	7440-43-9	
Calcium, Dissolved	245000 ug/L		400	20	10/26/12 12:58	11/06/12 05:31	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-47-3	
Cobalt, Dissolved	2.3 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-48-4	
Copper, Dissolved	1.4 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-50-8	
Iron, Dissolved	5590 ug/L		50.0	1	10/26/12 12:58	11/06/12 05:27	7439-89-6	
Lead, Dissolved	0.30 ug/L		0.10	1	10/26/12 12:58	11/06/12 05:27	7439-92-1	
Magnesium, Dissolved	33100 ug/L		100	20	10/26/12 12:58	11/06/12 05:31	7439-95-4	

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-6 SHALLOW_20121017	Lab ID: 60131713028	Collected: 10/18/12 11:01	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	5530 ug/L		10.0	20	10/26/12 12:58	11/06/12 05:31	7439-96-5	
Molybdenum, Dissolved	4.8 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7439-98-7	
Nickel, Dissolved	5.1 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-02-0	
Potassium, Dissolved	4480 ug/L		20.0	1	10/26/12 12:58	11/06/12 05:27	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:27	7440-22-4	
Sodium, Dissolved	5230 ug/L		50.0	1	10/26/12 12:58	11/06/12 05:27	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 05:27	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 05:27	7440-62-2	
Zinc, Dissolved	602 ug/L		100	20	10/26/12 12:58	11/06/12 05:31	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	142 ug/L		50.0	1	10/26/12 08:30	11/07/12 12:04	7429-90-5	
Antimony, Dissolved	0.11J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-36-0	
Arsenic, Dissolved	3.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-38-2	
Barium, Dissolved	15.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-39-3	
Beryllium, Dissolved	0.32J ug/L		0.50	1	10/26/12 08:30	11/07/12 12:04	7440-41-7	
Cadmium, Dissolved	0.28J ug/L		0.50	1	10/26/12 08:30	10/31/12 21:41	7440-43-9	
Chromium, Dissolved	0.79J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-47-3	
Cobalt, Dissolved	1.7 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-48-4	
Copper, Dissolved	1.5 ug/L		1.0	1	10/26/12 08:30	11/07/12 12:04	7440-50-8	
Iron, Dissolved	5150 ug/L		50.0	1	10/26/12 08:30	10/31/12 21:41	7439-89-6	
Lead, Dissolved	2.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7439-92-1	
Manganese, Dissolved	4810 ug/L		20.0	20	10/26/12 08:30	11/08/12 14:15	7439-96-5	
Molybdenum, Dissolved	4.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 21:41	7440-22-4	
Thallium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	10/26/12 08:30	10/31/12 21:41	7440-62-2	
Zinc, Dissolved	467 ug/L		10.0	1	10/26/12 08:30	10/31/12 21:41	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 14:21	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:46	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:25	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1310 umhos/cm		10.0	1			10/29/12 16:40	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Sample: MW-6 SHALLOW_20121017	Lab ID: 60131713028	Collected: 10/18/12 11:01	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	839 mg/L		6.0	1		10/30/12 10:47		
Salinity (as seawater)	0.65 PSU		0.010	1		10/30/12 10:47		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	192 mg/L		20.0	1		10/26/12 09:51		
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1		10/26/12 09:51		
Alkalinity, Total as CaCO3	192 mg/L		20.0	1		10/26/12 09:51		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	998 mg/L		5.0	1		10/25/12 15:54		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND mg/L		5.0	1		10/25/12 10:36		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1		10/25/12 22:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.4 mg/L		1.0	1		10/29/12 14:58	16887-00-6	
Sulfate	494 mg/L		100	100		10/28/12 19:32	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND mg/L		0.10	1		11/01/12 14:13		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1		10/24/12 15:39	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1		11/05/12 12:16	7440-44-0	

ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-6 DEEP_20121017	Lab ID: 60131713029	Collected: 10/18/12 10:54	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	307000 ug/L		100	1	10/26/12 16:30	10/31/12 16:18	7440-70-2	
Magnesium, Dissolved	50000 ug/L		50.0	1	10/26/12 16:30	10/31/12 16:18	7439-95-4	
Potassium, Dissolved	10900 ug/L		500	1	10/26/12 16:30	10/31/12 16:18	7440-09-7	
Sodium, Dissolved	3720 ug/L		500	1	10/26/12 16:30	10/31/12 16:18	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	9550 ug/L		4.0	1	10/26/12 13:00	11/06/12 07:45	7429-90-5	
Antimony	ND ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-36-0	
Arsenic	57.5 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-38-2	
Barium	69.5 ug/L		0.30	1	10/26/12 13:00	11/06/12 07:45	7440-39-3	
Beryllium	1.3 ug/L		0.20	1	10/26/12 13:00	11/06/12 07:45	7440-41-7	
Cadmium	5.8 ug/L		0.080	1	10/26/12 13:00	11/06/12 07:45	7440-43-9	
Calcium	358000 ug/L		400	20	10/26/12 13:00	11/06/12 07:49	7440-70-2	
Chromium	8.9 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-47-3	
Cobalt	7.9 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-48-4	
Copper	49.5 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-50-8	
Iron	56700 ug/L		1000	20	10/26/12 13:00	11/06/12 07:49	7439-89-6	
Lead	82.6 ug/L		0.10	1	10/26/12 13:00	11/06/12 07:45	7439-92-1	
Magnesium	54100 ug/L		100	20	10/26/12 13:00	11/06/12 07:49	7439-95-4	
Manganese	6540 ug/L		10.0	20	10/26/12 13:00	11/06/12 07:49	7439-96-5	
Molybdenum	5.6 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7439-98-7	
Nickel	10.8 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-02-0	
Potassium	12600 ug/L		20.0	1	10/26/12 13:00	11/06/12 07:45	7440-09-7	
Selenium	1.5 ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7782-49-2	
Silica	51100 ug/L		1070	20	10/26/12 13:00	11/06/12 07:49	7631-86-9	
Silver	ND ug/L		0.50	1	10/26/12 13:00	11/06/12 07:45	7440-22-4	
Sodium	4000 ug/L		50.0	1	10/26/12 13:00	11/06/12 07:45	7440-23-5	
Thallium	0.30 ug/L		0.10	1	10/26/12 13:00	11/06/12 07:45	7440-28-0	
Total Hardness by 2340B	1120000 ug/L		1420	20	10/26/12 13:00	11/06/12 07:49		
Vanadium	10.6 ug/L		0.10	1	10/26/12 13:00	11/06/12 07:45	7440-62-2	
Zinc	1910 ug/L		100	20	10/26/12 13:00	11/06/12 07:49	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	730 ug/L		4.0	1	10/26/12 12:58	11/06/12 05:36	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-36-0	
Arsenic, Dissolved	27.8 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-38-2	
Barium, Dissolved	16.6 ug/L		0.30	1	10/26/12 12:58	11/06/12 05:36	7440-39-3	
Beryllium, Dissolved	1.0 ug/L		0.20	1	10/26/12 12:58	11/06/12 05:36	7440-41-7	
Cadmium, Dissolved	0.34 ug/L		0.080	1	10/26/12 12:58	11/06/12 05:36	7440-43-9	
Calcium, Dissolved	355000 ug/L		400	20	10/26/12 12:58	11/06/12 05:40	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-47-3	
Cobalt, Dissolved	3.5 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-48-4	
Copper, Dissolved	0.62 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-50-8	
Iron, Dissolved	42800 ug/L		1000	20	10/26/12 12:58	11/06/12 05:40	7439-89-6	
Lead, Dissolved	0.15 ug/L		0.10	1	10/26/12 12:58	11/06/12 05:36	7439-92-1	B
Magnesium, Dissolved	50900 ug/L		100	20	10/26/12 12:58	11/06/12 05:40	7439-95-4	

Date: 12/05/2012 04:36 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-6 DEEP_20121017	Lab ID: 60131713029	Collected: 10/18/12 10:54	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	6570 ug/L		10.0	20	10/26/12 12:58	11/06/12 05:40	7439-96-5	
Molybdenum, Dissolved	4.0 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7439-98-7	
Nickel, Dissolved	4.1 ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-02-0	
Potassium, Dissolved	11200 ug/L		20.0	1	10/26/12 12:58	11/06/12 05:36	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 12:58	11/06/12 05:36	7440-22-4	
Sodium, Dissolved	3910 ug/L		50.0	1	10/26/12 12:58	11/06/12 05:36	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 05:36	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	10/26/12 12:58	11/06/12 05:36	7440-62-2	
Zinc, Dissolved	651 ug/L		100	20	10/26/12 12:58	11/06/12 05:40	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	4070 ug/L		100	2	10/26/12 08:30	11/07/12 12:08	7429-90-5	
Antimony, Dissolved	0.11J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-36-0	
Arsenic, Dissolved	40.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-38-2	
Barium, Dissolved	26.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-39-3	
Beryllium, Dissolved	1.1 ug/L		1.0	2	10/26/12 08:30	11/07/12 12:08	7440-41-7	
Cadmium, Dissolved	4.0 ug/L		0.50	1	10/26/12 08:30	10/31/12 21:45	7440-43-9	
Chromium, Dissolved	3.8 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-47-3	
Cobalt, Dissolved	5.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-48-4	
Copper, Dissolved	23.6 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-50-8	
Iron, Dissolved	44200 ug/L		50.0	1	10/26/12 08:30	10/31/12 21:45	7439-89-6	
Lead, Dissolved	70.5 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7439-92-1	
Manganese, Dissolved	6290 ug/L		2.0	2	10/26/12 08:30	11/07/12 12:08	7439-96-5	
Molybdenum, Dissolved	3.4 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7439-98-7	
Nickel, Dissolved	4.0 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-02-0	
Selenium, Dissolved	0.54J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	10/26/12 08:30	10/31/12 21:45	7440-22-4	
Thallium, Dissolved	0.18J ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-28-0	
Vanadium, Dissolved	3.3 ug/L		1.0	1	10/26/12 08:30	10/31/12 21:45	7440-62-2	
Zinc, Dissolved	1260 ug/L		10.0	1	10/26/12 08:30	10/31/12 21:45	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	10/31/12 15:13	11/01/12 14:24	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 00:00	11/07/12 13:48	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	10/26/12 16:45	10/27/12 16:27	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	1740 umhos/cm		10.0	1			10/29/12 16:41	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	1110 mg/L		6.0	1			10/30/12 10:47	

Date: 12/05/2012 04:36 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

Sample: MW-6 DEEP_20121017	Lab ID: 60131713029	Collected: 10/18/12 10:54	Received: 10/22/12 10:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.88	PSU	0.010	1		10/30/12 10:47		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	120	mg/L	20.0	1		10/26/12 09:55		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		10/26/12 09:55		
Alkalinity, Total as CaCO3	120	mg/L	20.0	1		10/26/12 09:55		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1570	mg/L	5.0	1		10/25/12 15:54		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	315	mg/L	5.0	1		10/25/12 10:36		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		10/25/12 22:49 18496-25-8		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	1.8	mg/L	1.0	1		10/29/12 15:14 16887-00-6		
Sulfate	910	mg/L	50.0	50		10/28/12 20:03 14808-79-8		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		11/01/12 14:14		
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		10/24/12 15:39 57-12-5		
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/05/12 12:30 7440-44-0		

December 03, 2012

Mark DeFriez
Anderson Engineering Company I
977 W 2100 S.
Salt Lake City, UT 84119

RE: Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Revised Report 12/4/12_rev.1
Added 353.2 Nitrate analysis

Dear Mark DeFriez:

Enclosed are the analytical results for sample(s) received by the laboratory on November 02, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

At the time of receipt of this project, the 353.2 Nitrate + Nitrite analysis was missed during log in. Unfortunately, the error was not noticed until after the samples were out of hold. Per the client's request, the samples were analyzed outside the hold time for the 353.2 Nitrate + Nitrite. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Heather Wilson

heather.wilson@pacelabs.com
Project Manager

Enclosures



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CERTIFICATIONS

Project: October 2012 Rico Water Sampli
 Pace Project No.: 60132534

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
 A2LA Certification #: 2926.01
 Alaska Certification #: UST-078
 Alaska Certification #MN00064
 Arizona Certification #: AZ-0014
 Arkansas Certification #: 88-0680
 California Certification #: 01155CA
 Colorado Certification #Pace
 Connecticut Certification #: PH-0256
 EPA Region 8 Certification #: Pace
 Florida/NELAP Certification #: E87605
 Georgia Certification #: 959
 Hawaii Certification #Pace
 Idaho Certification #: MN00064
 Illinois Certification #: 200011
 Kansas Certification #: E-10167
 Louisiana Certification #: 03086
 Louisiana Certification #: LA080009
 Maine Certification #: 2007029
 Maryland Certification #: 322
 Michigan DEQ Certification #: 9909
 Minnesota Certification #: 027-053-137
 Mississippi Certification #: Pace

Montana Certification #: MT CERT0092
 Nevada Certification #: MN_00064
 Nebraska Certification #: Pace
 New Jersey Certification #: MN-002
 New York Certification #: 11647
 North Carolina Certification #: 530
 North Dakota Certification #: R-036
 North Dakota Certification #: R-036A
 Ohio VAP Certification #: CL101
 Oklahoma Certification #: 9507
 Oregon Certification #: MN200001
 Oregon Certification #: MN300001
 Pennsylvania Certification #: 68-00563
 Puerto Rico Certification
 Tennessee Certification #: 02818
 Texas Certification #: T104704192
 Utah Certification #: MN00064
 Virginia/DCLS Certification #: 002521
 Virginia/VELAP Certification #: 460163
 Washington Certification #: C754
 West Virginia Certification #: 382
 Wisconsin Certification #: 999407970

Montana Certification IDs

602 South 25th Street, Billings, MT 59101
 EPA Region 8 Certification #: 8TMS-Q
 Idaho Certification #: MT00012
 Montana Certification #: MT CERT0040

NVLAP Certification #: 101292-0
 Minnesota Dept of Health Certification #: 030-999-442
 Washington Department of Ecology #: C993

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
 A2LA Certification #: 2456.01
 Arkansas Certification #: 12-019-0
 Illinois Certification #: 002885
 Iowa Certification #: 118
 Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
 Nevada Certification #: KS000212008A
 Oklahoma Certification #: 9205/9935
 Texas Certification #: T104704407-12-3
 Utah Certification #: KS000212012-2

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SAMPLE SUMMARY

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60132534001	DR-1 COMP 20121031	Water	10/31/12 12:30	11/02/12 08:20
60132534002	DR-2 COMP 20121031	Water	10/31/12 13:50	11/02/12 08:20
60132534003	DR-7 COMP 20121031	Water	10/31/12 14:20	11/02/12 08:20
60132534004	DR-4-SW COMP 20121031	Water	10/31/12 15:55	11/02/12 08:20

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SAMPLE ANALYTE COUNT

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60132534001	DR-1 COMP 20121031	EPA 200.7	JGP	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	NDJ	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	SEL	1	PASI-K
60132534002	DR-2 COMP 20121031	EPA 200.7	JGP	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	NDJ	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	SEL	1	PASI-K
60132534003	DR-7 COMP 20121031	EPA 200.7	JGP	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M

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SAMPLE ANALYTE COUNT

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60132534004	DR-4-SW COMP 20121031	EPA 200.8	JGP	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	NDJ	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	SEL	1	PASI-K
		EPA 200.7	JGP	4	PASI-K
		EPA 200.8	RJS	25	PASI-M
		EPA 200.8	RJS	23	PASI-M
		EPA 200.8	JGP	19	PASI-K
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	TEM	1	PASI-M
		EPA 245.1	NDJ	1	PASI-K
		SM 2510B	CAC	1	
		Calculated	CAC	2	
		SM 2320B	DJR	3	PASI-K
		SM 2540C	FJF	1	PASI-K
		SM 2540D	FJF	1	PASI-K
		SM 4500-S-2 D	SRM1	1	PASI-K
		EPA 300.0	AJM	2	PASI-K
		EPA 353.2	SRM1	1	PASI-K
		SM 4500-CN-E	OL	1	PASI-K
		SM 5310C	SEL	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-1 COMP 20121031	Lab ID: 60132534001	Collected: 10/31/12 12:30	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	48400 ug/L		100	1	11/20/12 16:00	11/21/12 14:21	7440-70-2	
Magnesium, Dissolved	6900 ug/L		50.0	1	11/20/12 16:00	11/21/12 14:21	7439-95-4	
Potassium, Dissolved	4390 ug/L		500	1	11/20/12 16:00	11/21/12 14:21	7440-09-7	
Sodium, Dissolved	3080 ug/L		500	1	11/20/12 16:00	11/21/12 14:21	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	47.3 ug/L		4.0	1	11/08/12 09:58	11/16/12 11:16	7429-90-5	M1
Antimony	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-36-0	
Arsenic	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-38-2	
Barium	74.9 ug/L		0.30	1	11/08/12 09:58	11/16/12 11:16	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/08/12 09:58	11/16/12 11:16	7440-41-7	
Cadmium	ND ug/L		0.080	1	11/08/12 09:58	11/16/12 11:16	7440-43-9	
Calcium	56200 ug/L		100	5	11/08/12 09:58	11/15/12 20:32	7440-70-2	M1
Chromium	0.50 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-48-4	
Copper	0.76 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-50-8	
Iron	128 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:16	7439-89-6	
Lead	0.27 ug/L		0.10	1	11/08/12 09:58	11/16/12 11:16	7439-92-1	
Magnesium	7970 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:16	7439-95-4	M1
Manganese	27.2 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7439-96-5	
Molybdenum	1.1 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7439-98-7	
Nickel	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-02-0	
Potassium	4190 ug/L		20.0	1	11/08/12 09:58	11/16/12 11:16	7440-09-7	M1
Selenium	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7782-49-2	
Silica	6820 ug/L		268	5	11/08/12 09:58	11/15/12 20:32	7631-86-9	
Silver	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:16	7440-22-4	
Sodium	2760 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:16	7440-23-5	
Thallium	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 11:16	7440-28-0	
Total Hardness by 2340B	173000 ug/L		355	5	11/08/12 09:58	11/15/12 20:32		
Vanadium	0.18 ug/L		0.10	1	11/08/12 09:58	11/16/12 11:16	7440-62-2	
Zinc	ND ug/L		5.0	1	11/08/12 09:58	11/16/12 11:16	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	ND ug/L		4.0	1	11/08/12 09:58	11/15/12 19:01	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-38-2	
Barium, Dissolved	71.6 ug/L		0.30	1	11/08/12 09:58	11/15/12 19:01	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	11/08/12 09:58	11/15/12 19:01	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.080	1	11/08/12 09:58	11/15/12 19:01	7440-43-9	
Calcium, Dissolved	56800 ug/L		100	5	11/08/12 09:58	11/15/12 19:17	7440-70-2	M1
Chromium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-48-4	
Copper, Dissolved	1.1 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-50-8	
Iron, Dissolved	ND ug/L		50.0	1	11/08/12 09:58	11/15/12 19:01	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:01	7439-92-1	
Magnesium, Dissolved	7590 ug/L		5.0	1	11/08/12 09:58	11/15/12 19:01	7439-95-4	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-1 COMP 20121031	Lab ID: 60132534001	Collected: 10/31/12 12:30	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	16.6 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7439-96-5	
Molybdenum, Dissolved	1.1 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7439-98-7	
Nickel, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-02-0	
Potassium, Dissolved	4520 ug/L		20.0	1	11/08/12 09:58	11/15/12 19:01	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:01	7440-22-4	
Sodium, Dissolved	2790 ug/L		50.0	1	11/08/12 09:58	11/15/12 19:01	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:01	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:01	7440-62-2	
Zinc, Dissolved	ND ug/L		5.0	1	11/08/12 09:58	11/15/12 19:01	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	19.7J ug/L		50.0	1	11/20/12 16:00	11/26/12 18:33	7429-90-5	
Antimony, Dissolved	0.077J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-36-0	
Arsenic, Dissolved	0.22J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-38-2	
Barium, Dissolved	70.4 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:33	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:33	7440-43-9	
Chromium, Dissolved	0.66J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-47-3	
Cobalt, Dissolved	0.075J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-48-4	
Copper, Dissolved	0.98J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-50-8	
Iron, Dissolved	76.8 ug/L		50.0	1	11/20/12 16:00	11/26/12 18:33	7439-89-6	
Lead, Dissolved	0.92J ug/L		1.0	1	11/27/12 12:00	11/28/12 09:14	7439-92-1	
Manganese, Dissolved	23.9 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7439-96-5	
Molybdenum, Dissolved	1.0 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-02-0	
Selenium, Dissolved	0.36J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7782-49-2	
Silver, Dissolved	0.11J ug/L		0.50	1	11/20/12 16:00	11/26/12 18:33	7440-22-4	
Thallium, Dissolved	0.058J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:33	7440-62-2	
Zinc, Dissolved	4.8J ug/L		10.0	1	11/20/12 16:00	11/26/12 18:33	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	11/08/12 18:11	11/09/12 11:44	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/08/12 18:01	11/09/12 11:18	7439-97-6	M1
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/20/12 15:00	11/21/12 09:55	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	365 umhos/cm		10.0	1			11/06/12 16:45	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	233 mg/L		6.0	1			11/07/12 16:51	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-1 COMP 20121031	Lab ID: 60132534001	Collected: 10/31/12 12:30	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.18 PSU		0.010	1		11/07/12 16:51		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	111 mg/L		20.0	1		11/05/12 11:44		
Alkalinity, Carbonate (CaCO3)	ND mg/L		20.0	1		11/05/12 11:44		
Alkalinity, Total as CaCO3	111 mg/L		20.0	1		11/05/12 11:44		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	226 mg/L		5.0	1		11/06/12 13:21		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND mg/L		5.0	1		11/06/12 10:09		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND mg/L		0.050	1		11/02/12 18:14	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	4.0 mg/L		1.0	1		11/06/12 22:52	16887-00-6	
Sulfate	67.8 mg/L		10.0	10		11/06/12 23:10	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	0.18 mg/L		0.10	1		12/03/12 14:44		H3
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND mg/L		0.0050	1		11/07/12 13:21	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND mg/L		1.0	1		11/16/12 14:49	7440-44-0	M1

ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Sample: DR-2 COMP 20121031	Lab ID: 60132534002	Collected: 10/31/12 13:50	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	72100 ug/L		100	1	11/20/12 16:00	11/21/12 14:29	7440-70-2	
Magnesium, Dissolved	9320 ug/L		50.0	1	11/20/12 16:00	11/21/12 14:29	7439-95-4	
Potassium, Dissolved	6550 ug/L		500	1	11/20/12 16:00	11/21/12 14:29	7440-09-7	
Sodium, Dissolved	3980 ug/L		500	1	11/20/12 16:00	11/21/12 14:29	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	28.9 ug/L		4.0	1	11/08/12 09:58	11/16/12 11:26	7429-90-5	
Antimony	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-36-0	
Arsenic	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-38-2	
Barium	72.8 ug/L		0.30	1	11/08/12 09:58	11/16/12 11:26	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/08/12 09:58	11/16/12 11:26	7440-41-7	
Cadmium	ND ug/L		0.080	1	11/08/12 09:58	11/16/12 11:26	7440-43-9	
Calcium	91400 ug/L		100	5	11/08/12 09:58	11/16/12 11:30	7440-70-2	
Chromium	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-48-4	
Copper	0.87 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-50-8	
Iron	252 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:26	7439-89-6	
Lead	0.36 ug/L		0.10	1	11/08/12 09:58	11/16/12 11:26	7439-92-1	
Magnesium	10800 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:26	7439-95-4	
Manganese	315 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7439-96-5	
Molybdenum	1.6 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7439-98-7	
Nickel	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-02-0	
Potassium	7650 ug/L		20.0	1	11/08/12 09:58	11/16/12 11:26	7440-09-7	
Selenium	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7782-49-2	
Silica	9840 ug/L		268	5	11/08/12 09:58	11/16/12 11:30	7631-86-9	
Silver	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:26	7440-22-4	
Sodium	4320 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:26	7440-23-5	
Thallium	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 11:26	7440-28-0	
Total Hardness by 2340B	273000 ug/L		355	5	11/08/12 09:58	11/16/12 11:30		
Vanadium	0.15 ug/L		0.10	1	11/08/12 09:58	11/16/12 11:26	7440-62-2	
Zinc	10.8 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:26	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	ND ug/L		4.0	1	11/08/12 09:58	11/15/12 19:21	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-36-0	
Arsenic, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-38-2	
Barium, Dissolved	70.1 ug/L		0.30	1	11/08/12 09:58	11/15/12 19:21	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	11/08/12 09:58	11/15/12 19:21	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.080	1	11/08/12 09:58	11/15/12 19:21	7440-43-9	
Calcium, Dissolved	82500 ug/L		100	5	11/08/12 09:58	11/15/12 19:26	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-48-4	
Copper, Dissolved	0.92 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-50-8	
Iron, Dissolved	87.7 ug/L		50.0	1	11/08/12 09:58	11/15/12 19:21	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:21	7439-92-1	
Magnesium, Dissolved	10000 ug/L		5.0	1	11/08/12 09:58	11/15/12 19:21	7439-95-4	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-2 COMP 20121031	Lab ID: 60132534002	Collected: 10/31/12 13:50	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	293 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7439-96-5	
Molybdenum, Dissolved	1.5 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7439-98-7	
Nickel, Dissolved	1.1 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-02-0	
Potassium, Dissolved	7760 ug/L		20.0	1	11/08/12 09:58	11/15/12 19:21	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:21	7440-22-4	
Sodium, Dissolved	4270 ug/L		50.0	1	11/08/12 09:58	11/15/12 19:21	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:21	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:21	7440-62-2	
Zinc, Dissolved	9.1 ug/L		5.0	1	11/08/12 09:58	11/15/12 19:21	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	24.2J ug/L		50.0	1	11/20/12 16:00	11/26/12 18:38	7429-90-5	
Antimony, Dissolved	0.060J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-36-0	
Arsenic, Dissolved	0.36J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-38-2	
Barium, Dissolved	67.7 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:38	7440-41-7	
Cadmium, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:38	7440-43-9	
Chromium, Dissolved	0.92J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-47-3	
Cobalt, Dissolved	0.15J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-48-4	
Copper, Dissolved	0.71J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-50-8	
Iron, Dissolved	235 ug/L		50.0	1	11/20/12 16:00	11/26/12 18:38	7439-89-6	
Lead, Dissolved	0.50J ug/L		1.0	1	11/27/12 12:00	11/28/12 09:18	7439-92-1	B
Manganese, Dissolved	293 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7439-96-5	
Molybdenum, Dissolved	1.4 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-02-0	
Selenium, Dissolved	0.39J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:38	7440-22-4	
Thallium, Dissolved	0.027J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:38	7440-62-2	
Zinc, Dissolved	8.9J ug/L		10.0	1	11/20/12 16:00	11/26/12 18:38	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	11/08/12 18:11	11/09/12 11:50	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/08/12 18:01	11/09/12 11:25	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/20/12 15:00	11/21/12 10:06	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	524 umhos/cm		10.0	1			11/06/12 16:45	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	335 mg/L		6.0	1			11/07/12 16:51	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-2 COMP 20121031	Lab ID: 60132534002	Collected: 10/31/12 13:50	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.25	PSU	0.010	1		11/07/12 16:51		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	131	mg/L	20.0	1		11/05/12 11:51		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		11/05/12 11:51		
Alkalinity, Total as CaCO3	131	mg/L	20.0	1		11/05/12 11:51		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	331	mg/L	5.0	1		11/06/12 13:22		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		11/06/12 10:10		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		11/02/12 18:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	6.0	mg/L	1.0	1		11/06/12 23:28	16887-00-6	
Sulfate	126	mg/L	10.0	10		11/07/12 02:07	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	0.10	mg/L	0.10	1		12/03/12 14:45		H3
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	0.011	mg/L	0.0050	1		11/07/12 13:22	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/16/12 15:17	7440-44-0	

ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-7 COMP 20121031	Lab ID: 60132534003	Collected: 10/31/12 14:20	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	92400 ug/L		100	1	11/20/12 16:00	11/21/12 14:31	7440-70-2	
Magnesium, Dissolved	11900 ug/L		50.0	1	11/20/12 16:00	11/21/12 14:31	7439-95-4	
Potassium, Dissolved	8580 ug/L		500	1	11/20/12 16:00	11/21/12 14:31	7440-09-7	
Sodium, Dissolved	5960 ug/L		500	1	11/20/12 16:00	11/21/12 14:31	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	10.8 ug/L		4.0	1	11/08/12 09:58	11/16/12 11:34	7429-90-5	
Antimony	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-36-0	
Arsenic	0.79 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-38-2	
Barium	68.1 ug/L		0.30	1	11/08/12 09:58	11/16/12 11:34	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/08/12 09:58	11/16/12 11:34	7440-41-7	
Cadmium	1.1 ug/L		0.080	1	11/08/12 09:58	11/16/12 11:34	7440-43-9	
Calcium	106000 ug/L		100	5	11/08/12 09:58	11/15/12 21:01	7440-70-2	
Chromium	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-48-4	
Copper	0.83 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-50-8	
Iron	260 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:34	7439-89-6	
Lead	0.17 ug/L		0.10	1	11/08/12 09:58	11/16/12 11:34	7439-92-1	
Magnesium	13800 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:34	7439-95-4	
Manganese	435 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7439-96-5	
Molybdenum	3.0 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7439-98-7	
Nickel	0.56 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-02-0	
Potassium	9410 ug/L		20.0	1	11/08/12 09:58	11/16/12 11:34	7440-09-7	
Selenium	0.52 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7782-49-2	
Silica	12500 ug/L		268	5	11/08/12 09:58	11/15/12 21:01	7631-86-9	
Silver	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:34	7440-22-4	
Sodium	6650 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:34	7440-23-5	
Thallium	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 11:34	7440-28-0	
Total Hardness by 2340B	322000 ug/L		355	5	11/08/12 09:58	11/15/12 21:01		
Vanadium	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 11:34	7440-62-2	
Zinc	207 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:34	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	4.4 ug/L		4.0	1	11/08/12 09:58	11/15/12 19:30	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-36-0	
Arsenic, Dissolved	0.65 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-38-2	
Barium, Dissolved	65.0 ug/L		0.30	1	11/08/12 09:58	11/15/12 19:30	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	11/08/12 09:58	11/15/12 19:30	7440-41-7	
Cadmium, Dissolved	1.1 ug/L		0.080	1	11/08/12 09:58	11/15/12 19:30	7440-43-9	
Calcium, Dissolved	106000 ug/L		100	5	11/08/12 09:58	11/15/12 19:34	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-47-3	
Cobalt, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-48-4	
Copper, Dissolved	1.0 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-50-8	
Iron, Dissolved	134 ug/L		50.0	1	11/08/12 09:58	11/15/12 19:30	7439-89-6	
Lead, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:30	7439-92-1	
Magnesium, Dissolved	12800 ug/L		5.0	1	11/08/12 09:58	11/15/12 19:30	7439-95-4	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-7 COMP 20121031	Lab ID: 60132534003	Collected: 10/31/12 14:20	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	405 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7439-96-5	
Molybdenum, Dissolved	3.0 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7439-98-7	
Nickel, Dissolved	1.7 ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-02-0	
Potassium, Dissolved	8830 ug/L		20.0	1	11/08/12 09:58	11/15/12 19:30	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/15/12 19:30	7440-22-4	
Sodium, Dissolved	6500 ug/L		50.0	1	11/08/12 09:58	11/15/12 19:30	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:30	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/15/12 19:30	7440-62-2	
Zinc, Dissolved	186 ug/L		5.0	1	11/08/12 09:58	11/15/12 19:30	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	12.0J ug/L		50.0	1	11/20/12 16:00	11/26/12 18:54	7429-90-5	
Antimony, Dissolved	0.098J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-36-0	
Arsenic, Dissolved	0.77J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-38-2	
Barium, Dissolved	62.3 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-39-3	
Beryllium, Dissolved	0.074J ug/L		0.50	1	11/20/12 16:00	11/26/12 18:54	7440-41-7	
Cadmium, Dissolved	0.90 ug/L		0.50	1	11/20/12 16:00	11/26/12 18:54	7440-43-9	
Chromium, Dissolved	0.59J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-47-3	
Cobalt, Dissolved	0.28J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-48-4	
Copper, Dissolved	0.73J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-50-8	
Iron, Dissolved	238 ug/L		50.0	1	11/20/12 16:00	11/26/12 18:54	7439-89-6	
Lead, Dissolved	0.25J ug/L		1.0	1	11/27/12 12:00	11/28/12 09:21	7439-92-1	B
Manganese, Dissolved	403 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7439-96-5	
Molybdenum, Dissolved	2.7 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-02-0	
Selenium, Dissolved	0.39J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7782-49-2	
Silver, Dissolved	0.11J ug/L		0.50	1	11/20/12 16:00	11/26/12 18:54	7440-22-4	
Thallium, Dissolved	0.085J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:54	7440-62-2	
Zinc, Dissolved	166 ug/L		10.0	1	11/20/12 16:00	11/26/12 18:54	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	11/08/12 18:11	11/09/12 11:57	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/08/12 18:01	11/09/12 11:27	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/20/12 15:00	11/21/12 10:08	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	651 umhos/cm		10.0	1			11/06/12 16:48	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	417 mg/L		6.0	1			11/07/12 16:51	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-7 COMP 20121031	Lab ID: 60132534003	Collected: 10/31/12 14:20	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.32	PSU	0.010	1		11/07/12 16:51		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO ₃)	151	mg/L	20.0	1		11/05/12 12:17		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		11/05/12 12:17		
Alkalinity, Total as CaCO ₃	151	mg/L	20.0	1		11/05/12 12:17		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	447	mg/L	5.0	1		11/06/12 13:22		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		11/06/12 10:10		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		11/02/12 18:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	2.8	mg/L	1.0	1		11/07/12 02:25	16887-00-6	
Sulfate	193	mg/L	20.0	20		11/07/12 02:42	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ pres.	Analytical Method: EPA 353.2							
Nitrogen, NO ₂ plus NO ₃	ND	mg/L	0.10	1		12/03/12 14:46		H3
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	ND	mg/L	0.0050	1		11/07/12 13:24	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/16/12 15:46	7440-44-0	

ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-4-SW COMP 20121031	Lab ID: 60132534004	Collected: 10/31/12 15:55	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.7 Potentially Diss. Metals	Analytical Method: EPA 200.7 Preparation Method: EPA 200.7							
Calcium, Dissolved	109000 ug/L		100	1	11/20/12 16:00	11/21/12 14:33	7440-70-2	
Magnesium, Dissolved	13900 ug/L		50.0	1	11/20/12 16:00	11/21/12 14:33	7439-95-4	
Potassium, Dissolved	8830 ug/L		500	1	11/20/12 16:00	11/21/12 14:33	7440-09-7	
Sodium, Dissolved	7170 ug/L		500	1	11/20/12 16:00	11/21/12 14:33	7440-23-5	
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum	19.2 ug/L		4.0	1	11/08/12 09:58	11/16/12 11:39	7429-90-5	
Antimony	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-36-0	
Arsenic	0.64 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-38-2	
Barium	76.7 ug/L		0.30	1	11/08/12 09:58	11/16/12 11:39	7440-39-3	
Beryllium	ND ug/L		0.20	1	11/08/12 09:58	11/16/12 11:39	7440-41-7	
Cadmium	1.4 ug/L		0.080	1	11/08/12 09:58	11/16/12 11:39	7440-43-9	
Calcium	144000 ug/L		200	10	11/08/12 09:58	11/16/12 11:43	7440-70-2	
Chromium	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-47-3	
Cobalt	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-48-4	
Copper	1.0 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-50-8	
Iron	162 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:39	7439-89-6	
Lead	0.40 ug/L		0.10	1	11/08/12 09:58	11/16/12 11:39	7439-92-1	
Magnesium	15800 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:39	7439-95-4	
Manganese	489 ug/L		2.5	5	11/08/12 09:58	11/15/12 21:10	7439-96-5	
Molybdenum	3.4 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7439-98-7	
Nickel	0.91 ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-02-0	
Potassium	9500 ug/L		20.0	1	11/08/12 09:58	11/16/12 11:39	7440-09-7	
Selenium	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7782-49-2	
Silica	14000 ug/L		268	5	11/08/12 09:58	11/15/12 21:10	7631-86-9	
Silver	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 11:39	7440-22-4	
Sodium	7610 ug/L		50.0	1	11/08/12 09:58	11/16/12 11:39	7440-23-5	
Thallium	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 11:39	7440-28-0	
Total Hardness by 2340B	425000 ug/L		710	10	11/08/12 09:58	11/16/12 11:43		
Vanadium	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 11:39	7440-62-2	
Zinc	278 ug/L		5.0	1	11/08/12 09:58	11/16/12 11:39	7440-66-6	
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	9.7 ug/L		4.0	1	11/08/12 09:58	11/16/12 10:40	7429-90-5	
Antimony, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-36-0	
Arsenic, Dissolved	0.65 ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-38-2	
Barium, Dissolved	75.7 ug/L		0.30	1	11/08/12 09:58	11/16/12 10:40	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.20	1	11/08/12 09:58	11/16/12 10:40	7440-41-7	
Cadmium, Dissolved	1.4 ug/L		0.080	1	11/08/12 09:58	11/16/12 10:40	7440-43-9	
Calcium, Dissolved	144000 ug/L		200	10	11/08/12 09:58	11/16/12 15:41	7440-70-2	
Chromium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-47-3	
Cobalt, Dissolved	0.69 ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-48-4	
Copper, Dissolved	1.7 ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-50-8	
Iron, Dissolved	51.9 ug/L		50.0	1	11/08/12 09:58	11/16/12 10:40	7439-89-6	
Lead, Dissolved	0.16 ug/L		0.10	1	11/08/12 09:58	11/16/12 10:40	7439-92-1	
Magnesium, Dissolved	15700 ug/L		5.0	1	11/08/12 09:58	11/16/12 10:40	7439-95-4	

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Sample: DR-4-SW COMP 20121031	Lab ID: 60132534004	Collected: 10/31/12 15:55	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS, Dissolved	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Manganese, Dissolved	506 ug/L		2.5	5	11/08/12 09:58	11/16/12 10:44	7439-96-5	
Molybdenum, Dissolved	3.4 ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7439-98-7	
Nickel, Dissolved	1.7 ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-02-0	
Potassium, Dissolved	9450 ug/L		20.0	1	11/08/12 09:58	11/16/12 10:40	7440-09-7	
Selenium, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	11/08/12 09:58	11/16/12 10:40	7440-22-4	
Sodium, Dissolved	7620 ug/L		50.0	1	11/08/12 09:58	11/16/12 10:40	7440-23-5	
Thallium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 10:40	7440-28-0	
Vanadium, Dissolved	ND ug/L		0.10	1	11/08/12 09:58	11/16/12 10:40	7440-62-2	
Zinc, Dissolved	266 ug/L		5.0	1	11/08/12 09:58	11/16/12 10:40	7440-66-6	
200.8 Potentially Diss. Metals	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8							
Aluminum, Dissolved	20.0J ug/L		50.0	1	11/20/12 16:00	11/26/12 18:58	7429-90-5	
Antimony, Dissolved	0.084J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-36-0	
Arsenic, Dissolved	0.65J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-38-2	
Barium, Dissolved	72.4 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-39-3	
Beryllium, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:58	7440-41-7	
Cadmium, Dissolved	1.3 ug/L		0.50	1	11/20/12 16:00	11/26/12 18:58	7440-43-9	
Chromium, Dissolved	0.70J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-47-3	
Cobalt, Dissolved	0.37J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-48-4	
Copper, Dissolved	0.93J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-50-8	
Iron, Dissolved	177 ug/L		50.0	1	11/20/12 16:00	11/26/12 18:58	7439-89-6	
Lead, Dissolved	1.8 ug/L		1.0	1	11/27/12 12:00	11/28/12 09:25	7439-92-1	
Manganese, Dissolved	494 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7439-96-5	
Molybdenum, Dissolved	3.0 ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7439-98-7	
Nickel, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-02-0	
Selenium, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7782-49-2	
Silver, Dissolved	ND ug/L		0.50	1	11/20/12 16:00	11/26/12 18:58	7440-22-4	
Thallium, Dissolved	0.048J ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-28-0	
Vanadium, Dissolved	ND ug/L		1.0	1	11/20/12 16:00	11/26/12 18:58	7440-62-2	
Zinc, Dissolved	226 ug/L		10.0	1	11/20/12 16:00	11/26/12 18:58	7440-66-6	
245.1 Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury	ND ug/L		0.20	1	11/08/12 18:11	11/09/12 11:59	7439-97-6	
245.1 Mercury, Dissolved	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/08/12 18:01	11/09/12 11:29	7439-97-6	
245.1 Potentially Diss Mercury	Analytical Method: EPA 245.1 Preparation Method: EPA 245.1							
Mercury, Dissolved	ND ug/L		0.20	1	11/20/12 15:00	11/21/12 10:10	7439-97-6	
2510B Specific Conductance	Analytical Method: SM 2510B							
Specific Conductance	697 umhos/cm		10.0	1			11/06/12 16:50	
Salinity	Analytical Method: Calculated							
Salinity (as dissolved solids)	446 mg/L		6.0	1			11/07/12 16:51	

Date: 12/03/2012 04:53 PM

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

Sample: DR-4-SW COMP 20121031	Lab ID: 60132534004	Collected: 10/31/12 15:55	Received: 11/02/12 08:20	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Salinity	Analytical Method: Calculated							
Salinity (as seawater)	0.34	PSU	0.010	1		11/07/12 16:51		
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	170	mg/L	20.0	1		11/05/12 12:36		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		11/05/12 12:36		
Alkalinity, Total as CaCO3	170	mg/L	20.0	1		11/05/12 12:36		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	515	mg/L	5.0	1		11/06/12 13:22		
2540D Total Suspended Solids	Analytical Method: SM 2540D							
Total Suspended Solids	ND	mg/L	5.0	1		11/06/12 10:11		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D							
Sulfide, Total	ND	mg/L	0.050	1		11/02/12 18:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Chloride	2.0	mg/L	1.0	1		11/07/12 03:00	16887-00-6	
Sulfate	229	mg/L	20.0	20		11/07/12 03:53	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	1		12/03/12 14:47		H3
4500CNE Cyanide, Total	Analytical Method: SM 4500-CN-E							
Cyanide	0.0057	mg/L	0.0050	1		11/07/12 13:25	57-12-5	
5310C TOC	Analytical Method: SM 5310C							
Total Organic Carbon	ND	mg/L	1.0	1		11/16/12 16:28	7440-44-0	

Appendix D
Laboratory QC Results

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MERP/7700	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury
Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020			

METHOD BLANK: 1319577 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Mercury	ug/L	ND	0.20	11/07/12 13:24	

LABORATORY CONTROL SAMPLE: 1319578

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Mercury	ug/L	5	5.2	104	85-115	

MATRIX SPIKE SAMPLE: 1319581

Parameter	Units	60131713020	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits	
Mercury	ug/L	ND	5	5.4	108	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1319692 1319693

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	Max	Qual
		Spike	Spike	Result	Result	% Rec	% Rec	Limits	RPD	
Mercury	ug/L	ND	5	5	4.6	4.0	91	80	85-115	13 30 M1

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	MERP/7727	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK:	1323184	Matrix:	Water
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	11/01/12 13:48	

LABORATORY CONTROL SAMPLE: 1323185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.0	101	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1323186 1323187

Parameter	Units	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury	ug/L	ND	5	5	5.5	5.5	110	111	85-115	.4	30

MATRIX SPIKE SAMPLE: 1323188

Parameter	Units	Result	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	5	6.4	125	85-115 M1

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MERP/7697	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury - Dissolved
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK: 1319553 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Mercury, Dissolved	ug/L	ND	0.20	11/07/12 10:16	

LABORATORY CONTROL SAMPLE: 1319554

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Mercury, Dissolved	ug/L	5	5.2	103	85-115	

MATRIX SPIKE SAMPLE: 1319557

Parameter	Units	60131713020	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec		
Mercury, Dissolved	ug/L	ND	5	5.5	111	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1319698 1319699

Parameter	Units	60131713002	MS	MSD	MS	MS	MSD	% Rec	Max	Qual
		Result	Spike	Conc.	Result	Result	% Rec	% Rec	RPD	
Mercury, Dissolved	ug/L	ND	5	5	5.6	5.5	112	110	85-115	1 20

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	MERP/7698	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury - Dissolved
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029		

METHOD BLANK: 1319558 Matrix: Water

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027,
60131713028, 60131713029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	11/07/12 13:14	

LABORATORY CONTROL SAMPLE: 1319559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	5.5	110	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1320061 1320062

Parameter	Units	60131713022 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	4.8	5.5	95	109	85-115	14	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MERP/7822	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury - Dissolved
Associated Lab Samples:	60131713030		

METHOD BLANK: 1343191 Matrix: Water

Associated Lab Samples: 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	12/03/12 09:21	

LABORATORY CONTROL SAMPLE: 1343192

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1343193 1343194

Parameter	Units	60131713030	MS Spike Result	MSD Spike Result	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
Mercury, Dissolved	ug/L	ND	5	5	4.8	4.9	95	98	85-115	4	20	H1,H2

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MERP/6762	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury, Potentially Dissolved
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK: 1087177 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Mercury, Dissolved	ug/L	ND	0.20	10/27/12 14:51	

LABORATORY CONTROL SAMPLE: 1087178

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Mercury, Dissolved	ug/L	5	5.4	107	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1087179 1087180

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60131713004	Spike										
Mercury, Dissolved	ug/L	ND	5	5	5.2	5.0	104	100	70-130	4	20		

MATRIX SPIKE SAMPLE: 1087181

Parameter	Units	60131713014		Spike	MS	MS	% Rec	% Rec	Qualifiers
		Result	Conc.	Conc.	Result	% Rec	Limits		
Mercury, Dissolved	ug/L	ND	5	5	5.2	104	100	70-130	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	MERP/6763	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury, Potentially Dissolved
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK: 1087184 Matrix: Water

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027,
60131713028, 60131713029, 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	10/27/12 15:56	

LABORATORY CONTROL SAMPLE: 1087185

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	5.2	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1087186 1087187

Parameter	Units	60131713024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	4.7	5.0	94	100	70-130	6	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MERP/7713	Analysis Method:	EPA 7471
QC Batch Method:	EPA 7471	Analysis Description:	7471 Mercury
Associated Lab Samples:	60131714003		

METHOD BLANK: 1320364 Matrix: Solid

Associated Lab Samples: 60131714003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/kg	ND	0.018	10/29/12 13:56	

LABORATORY CONTROL SAMPLE: 1320365

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.48	0.45	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1320366 1320367

Parameter	Units	10210041001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Mercury	mg/kg	0.34	3.52	3.6	3.8	4.0	98	101	80-120	6	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/20181	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Potentially Dissolved Metals
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019		

METHOD BLANK: 1087069 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007,
60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014,
60131713015, 60131713016, 60131713017, 60131713018, 60131713019

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Calcium, Dissolved	ug/L	55.4J	100	10/31/12 13:05	
Magnesium, Dissolved	ug/L	ND	50.0	10/31/12 13:05	
Potassium, Dissolved	ug/L	ND	500	10/31/12 13:05	
Sodium, Dissolved	ug/L	25.7J	500	10/31/12 13:05	

LABORATORY CONTROL SAMPLE: 1087070

Parameter	Units	Spike	LCS	LCS	% Rec	Limits	Qualifiers
		Conc.	Result	% Rec			
Calcium, Dissolved	ug/L	10000	9140	91	85-115		
Magnesium, Dissolved	ug/L	10000	9180	92	85-115		
Potassium, Dissolved	ug/L	10000	9050	91	85-115		
Sodium, Dissolved	ug/L	10000	9490	95	85-115		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1087071 1087072

Parameter	Units	MS	MSD	MS	MSD	% Rec	MSD	% Rec	Limits	RPD	Max	Qual
		60131713001	Spike	Spike	Result	Result	Result	Result				
Calcium, Dissolved	ug/L	44500	20000	20000	62700	61300	91	84	70-130	2	20	
Magnesium, Dissolved	ug/L	6350	20000	20000	24300	23800	90	87	70-130	2	20	
Potassium, Dissolved	ug/L	705	20000	20000	19000	18800	91	90	70-130	1	20	
Sodium, Dissolved	ug/L	2780	20000	20000	21800	21400	95	93	70-130	2	20	

MATRIX SPIKE SAMPLE: 1087073

Parameter	Units	60131713010	Spike	MS	MS	% Rec	Limits	Qualifiers
		Result	Conc.	Result	% Rec			
Calcium, Dissolved	ug/L	70100	20000	95800	129	70-130		
Magnesium, Dissolved	ug/L	9420	20000	30300	104	70-130		
Potassium, Dissolved	ug/L	1880	20000	20800	95	70-130		
Sodium, Dissolved	ug/L	4150	20000	24200	100	70-130		

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/20182	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Potentially Dissolved Metals
Associated Lab Samples:	60131713020, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK: 1087074 Matrix: Water

Associated Lab Samples: 60131713020, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027,
60131713028, 60131713029, 60131713030

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Calcium, Dissolved	ug/L	38.4J	100	10/31/12 15:20	
Magnesium, Dissolved	ug/L	ND	50.0	10/31/12 15:20	
Potassium, Dissolved	ug/L	ND	500	10/31/12 15:20	
Sodium, Dissolved	ug/L	25.0J	500	10/31/12 15:20	

LABORATORY CONTROL SAMPLE: 1087075

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Calcium, Dissolved	ug/L	10000	9060	91	85-115	
Magnesium, Dissolved	ug/L	10000	9000	90	85-115	
Potassium, Dissolved	ug/L	10000	9300	93	85-115	
Sodium, Dissolved	ug/L	10000	9700	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1087076 1087077

Parameter	Units	MS		MSD		MS	MSD	% Rec	% Rec	Max	
		60131713020	Spk Conc.	Spk Conc.	MS Result	MSD Result	% Rec	% Rec	Limits	RPD	RPD
Calcium, Dissolved	ug/L	203000	10000	10000	215000	214000	117	105	70-130	1	20
Magnesium, Dissolved	ug/L	18200	10000	10000	28300	27700	101	94	70-130	2	20
Potassium, Dissolved	ug/L	1770	10000	10000	11400	10800	96	90	70-130	5	20
Sodium, Dissolved	ug/L	9740	10000	10000	19900	19000	102	92	70-130	5	20

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	MPRP/20296	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Potentially Dissolved Metals
Associated Lab Samples:	60131713021		

METHOD BLANK: 1091362 Matrix: Water

Associated Lab Samples: 60131713021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium, Dissolved	ug/L	ND	100	11/01/12 15:12	
Magnesium, Dissolved	ug/L	ND	50.0	11/01/12 15:12	
Sodium, Dissolved	ug/L	ND	500	11/01/12 15:12	

LABORATORY CONTROL SAMPLE: 1091363

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	ug/L	10000	10200	102	85-115	
Magnesium, Dissolved	ug/L	10000	10600	106	85-115	
Sodium, Dissolved	ug/L	10000	10600	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1091364 1091365

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max			
		60131713021	Spike Conc.	Spike Conc.	MS Result				RPD	RPD	Qual	
Calcium, Dissolved	ug/L	227000	10000	10000	244000	246000	171	196	70-130	1	20	M1
Magnesium, Dissolved	ug/L	20200	10000	10000	31000	32000	107	117	70-130	3	20	
Sodium, Dissolved	ug/L	11800	10000	10000	22900	23200	111	115	70-130	1	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/20313	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Potentially Dissolved Metals
Associated Lab Samples:	60131713021		

METHOD BLANK: 1092871 Matrix: Water

Associated Lab Samples: 60131713021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Potassium, Dissolved	ug/L	ND	500	11/05/12 12:08	

LABORATORY CONTROL SAMPLE: 1092872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Potassium, Dissolved	ug/L	10000	9880	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1092873 1092874

Parameter	Units	MS Result	MS Spike Conc.	MSD Result	MS Spike Conc.	MS Result	MS % Rec	MSD Result	MS % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Potassium, Dissolved	ug/L	60131713021	2250	10000	10000	12400	12700	102	105	70-130	2	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch: MPRP/36003 Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007,
60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014,
60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

METHOD BLANK: 1319521

Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007,
60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014,
60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	4.0	11/01/12 19:01	
Antimony	ug/L	ND	0.50	11/01/12 19:01	
Arsenic	ug/L	ND	0.50	11/01/12 19:01	
Barium	ug/L	ND	0.30	11/01/12 19:01	
Beryllium	ug/L	ND	0.20	11/01/12 19:01	
Cadmium	ug/L	ND	0.080	11/01/12 19:01	
Calcium	ug/L	ND	20.0	11/01/12 19:01	
Chromium	ug/L	ND	0.50	11/01/12 19:01	
Cobalt	ug/L	ND	0.50	11/01/12 19:01	
Copper	ug/L	ND	0.50	11/01/12 19:01	
Iron	ug/L	ND	50.0	11/01/12 19:01	
Lead	ug/L	ND	0.10	11/01/12 19:01	
Magnesium	ug/L	ND	5.0	11/01/12 19:01	
Manganese	ug/L	ND	0.50	11/01/12 19:01	
Molybdenum	ug/L	ND	0.50	11/01/12 19:01	
Nickel	ug/L	ND	0.50	11/01/12 19:01	
Potassium	ug/L	ND	20.0	11/01/12 19:01	
Selenium	ug/L	ND	0.50	11/01/12 19:01	
Silica	ug/L	ND	53.5	11/01/12 19:01	
Silver	ug/L	ND	0.50	11/01/12 19:01	
Sodium	ug/L	ND	50.0	11/01/12 19:01	
Thallium	ug/L	ND	0.10	11/01/12 19:01	
Total Hardness by 2340B	ug/L	ND	71.0	11/01/12 19:01	
Vanadium	ug/L	ND	0.10	11/01/12 19:01	
Zinc	ug/L	ND	5.0	11/01/12 19:01	

LABORATORY CONTROL SAMPLE: 1319522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	84.6	106	85-115	
Antimony	ug/L	80	83.4	104	85-115	
Arsenic	ug/L	80	80.5	101	85-115	
Barium	ug/L	80	82.0	103	85-115	
Beryllium	ug/L	80	80.4	101	85-115	
Cadmium	ug/L	80	84.0	105	85-115	
Calcium	ug/L	1000	1080	108	85-115	
Chromium	ug/L	80	80.9	101	85-115	
Cobalt	ug/L	80	81.5	102	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1319522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	80	86.4	108	85-115	
Iron	ug/L	1000	1040	104	85-115	
Lead	ug/L	80	80.9	101	85-115	
Magnesium	ug/L	1000	1010	101	85-115	
Manganese	ug/L	80	84.0	105	85-115	
Molybdenum	ug/L	80	83.4	104	85-115	
Nickel	ug/L	80	82.9	104	85-115	
Potassium	ug/L	1000	1020	102	85-115	
Selenium	ug/L	80	83.3	104	85-115	
Silica	ug/L	2140	2160	101	85-115	
Silver	ug/L	80	82.0	103	85-115	
Sodium	ug/L	1000	1010	101	85-115	
Thallium	ug/L	80	81.6	102	85-115	
Total Hardness by 2340B	ug/L	6620	6860	104	85-115	
Vanadium	ug/L	80	84.0	105	85-115	
Zinc	ug/L	80	82.4	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1319523 1319524

Parameter	Units	MS 60131713001		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Conc.	Result								
Aluminum	ug/L	12.0	80	80	107	107	119	118	70-130	.2	20		
Antimony	ug/L	ND	80	80	83.2	83.9	104	105	70-130	.8	20		
Arsenic	ug/L	ND	80	80	80.4	79.4	101	99	70-130	1	20		
Barium	ug/L	74.9	80	80	156	157	101	102	70-130	.3	20		
Beryllium	ug/L	ND	80	80	83.0	77.0	104	96	70-130	8	20		
Cadmium	ug/L	ND	80	80	84.8	84.6	106	106	70-130	.2	20		
Calcium	ug/L	50300	1000	1000	51000	50400	70	10	70-130	1	20	M1	
Chromium	ug/L	ND	80	80	79.5	77.8	99	97	70-130	2	20		
Cobalt	ug/L	ND	80	80	80.8	81.2	101	101	70-130	.5	20		
Copper	ug/L	ND	80	80	86.0	85.6	107	107	70-130	.4	20		
Iron	ug/L	ND	1000	1000	1080	1070	104	103	70-130	.9	20		
Lead	ug/L	ND	80	80	81.2	81.4	101	102	70-130	.2	20		
Magnesium	ug/L	6870	1000	1000	7970	7880	110	101	70-130	1	20		
Manganese	ug/L	18.2	80	80	102	102	105	105	70-130	.5	20		
Molybdenum	ug/L	0.94	80	80	85.8	84.4	106	104	70-130	2	20		
Nickel	ug/L	ND	80	80	81.2	81.2	102	102	70-130	0	20		
Potassium	ug/L	738	1000	1000	1800	1780	107	104	70-130	1	20		
Selenium	ug/L	ND	80	80	84.9	83.0	106	103	70-130	2	20		
Silica	ug/L	6180	2140	2140	8640	8310	115	100	70-130	4	20		
Silver	ug/L	ND	80	80	81.3	80.4	102	101	70-130	1	20		
Sodium	ug/L	2730	1000	1000	3790	3770	106	104	70-130	.6	20		
Thallium	ug/L	ND	80	80	82.0	82.6	102	103	70-130	.7	20		
Total Hardness by 2340B	ug/L	154000	6620	6620	160000	158000	95	67	70-130	1	20	M1	
Vanadium	ug/L	0.13	80	80	85.2	85.0	106	106	70-130	.4	20		
Zinc	ug/L	ND	80	80	83.8	84.4	102	103	70-130	.7	20		

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

MATRIX SPIKE SAMPLE: 1319525

Parameter	Units	60131713011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	4.8	80	89.2	105	70-130	
Antimony	ug/L	ND	80	82.2	103	70-130	
Arsenic	ug/L	ND	80	78.6	98	70-130	
Barium	ug/L	0.58	80	82.0	102	70-130	
Beryllium	ug/L	ND	80	82.4	103	70-130	
Cadmium	ug/L	ND	80	85.4	107	70-130	
Calcium	ug/L	97.7	1000	1150	105	70-130	
Chromium	ug/L	ND	80	78.8	99	70-130	
Cobalt	ug/L	ND	80	80.7	101	70-130	
Copper	ug/L	ND	80	86.0	107	70-130	
Iron	ug/L	ND	1000	1040	103	70-130	
Lead	ug/L	0.13	80	80.8	101	70-130	
Magnesium	ug/L	19.5	1000	1040	102	70-130	
Manganese	ug/L	1.4	80	89.4	110	70-130	
Molybdenum	ug/L	ND	80	84.0	105	70-130	
Nickel	ug/L	ND	80	80.7	101	70-130	
Potassium	ug/L	71.5	1000	1130	105	70-130	
Selenium	ug/L	ND	80	80.6	101	70-130	
Silica	ug/L	87.1	2140	2200	99	70-130	
Silver	ug/L	ND	80	80.8	101	70-130	
Sodium	ug/L	362	1000	1390	103	70-130	
Thallium	ug/L	ND	80	81.0	101	70-130	
Total Hardness by 2340B	ug/L	324	6620	7170	104	70-130	
Vanadium	ug/L	ND	80	84.2	105	70-130	
Zinc	ug/L	ND	80	83.8	101	70-130	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/36004	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 MET
Associated Lab Samples:	60131713024, 60131713026, 60131713029		

METHOD BLANK: 1319526 Matrix: Water

Associated Lab Samples: 60131713024, 60131713026, 60131713029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	4.0	11/06/12 06:25	
Antimony	ug/L	ND	0.50	11/06/12 06:25	
Arsenic	ug/L	ND	0.50	11/06/12 06:25	
Barium	ug/L	ND	0.30	11/06/12 06:25	
Beryllium	ug/L	ND	0.20	11/06/12 06:25	
Cadmium	ug/L	ND	0.080	11/06/12 06:25	
Calcium	ug/L	ND	20.0	11/06/12 06:25	
Chromium	ug/L	ND	0.50	11/06/12 06:25	
Cobalt	ug/L	ND	0.50	11/06/12 06:25	
Copper	ug/L	0.63	0.50	11/06/12 16:42	P8
Iron	ug/L	ND	50.0	11/06/12 06:25	
Lead	ug/L	ND	0.10	11/06/12 16:42	
Magnesium	ug/L	ND	5.0	11/06/12 16:42	
Manganese	ug/L	ND	0.50	11/06/12 06:25	
Molybdenum	ug/L	ND	0.50	11/06/12 06:25	
Nickel	ug/L	ND	0.50	11/06/12 06:25	
Potassium	ug/L	ND	20.0	11/06/12 06:25	
Selenium	ug/L	ND	0.50	11/06/12 06:25	
Silica	ug/L	ND	53.5	11/06/12 06:25	
Silver	ug/L	ND	0.50	11/06/12 06:25	
Sodium	ug/L	ND	50.0	11/06/12 06:25	
Thallium	ug/L	ND	0.10	11/06/12 16:42	
Total Hardness by 2340B	ug/L	ND	71.0	11/06/12 16:42	
Vanadium	ug/L	ND	0.10	11/06/12 06:25	
Zinc	ug/L	ND	5.0	11/06/12 06:25	

LABORATORY CONTROL SAMPLE: 1319527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	86.2	108	85-115	
Antimony	ug/L	80	79.6	99	85-115	
Arsenic	ug/L	80	79.5	99	85-115	
Barium	ug/L	80	81.1	101	85-115	
Beryllium	ug/L	80	82.6	103	85-115	
Cadmium	ug/L	80	82.3	103	85-115	
Calcium	ug/L	1000	1130	113	85-115	
Chromium	ug/L	80	83.9	105	85-115	
Cobalt	ug/L	80	82.4	103	85-115	
Copper	ug/L	80	83.5	104	85-115	
Iron	ug/L	1000	1050	105	85-115	
Lead	ug/L	80	79.9	100	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1319527

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	1000	1030	103	85-115	
Manganese	ug/L	80	82.3	103	85-115	
Molybdenum	ug/L	80	79.7	100	85-115	
Nickel	ug/L	80	83.7	105	85-115	
Potassium	ug/L	1000	1020	102	85-115	
Selenium	ug/L	80	80.8	101	85-115	
Silica	ug/L	2140	2210	103	85-115	
Silver	ug/L	80	83.2	104	85-115	
Sodium	ug/L	1000	1050	105	85-115	
Thallium	ug/L	80	80.4	100	85-115	
Total Hardness by 2340B	ug/L	6620	7070	107	85-115	
Vanadium	ug/L	80	80.7	101	85-115	
Zinc	ug/L	80	82.1	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1319528 1319529

Parameter	Units	MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		10211718001	Conc.	Conc.	Result								
Aluminum	ug/L	60.1	80	80	168	176	136	145	70-130	5	20	M6	
Antimony	ug/L	ND	80	80	81.0	80.6	101	101	70-130	.4	20		
Arsenic	ug/L	0.64	80	80	81.7	82.3	101	102	70-130	.7	20		
Barium	ug/L	17.7	80	80	96.5	99.5	98	102	70-130	3	20		
Beryllium	ug/L	ND	80	80	84.0	81.5	105	102	70-130	3	20		
Cadmium	ug/L	2.0	80	80	85.0	83.3	104	102	70-130	2	20		
Calcium	ug/L	237000	1000	1000	240000	244000	250	720	70-130	2	20	E,M6	
Chromium	ug/L	0.92	80	80	81.4	82.9	101	103	70-130	2	20		
Cobalt	ug/L	ND	80	80	81.3	81.9	102	102	70-130	.8	20		
Copper	ug/L	3.1	80	80	85.4	86.0	103	104	70-130	.8	20		
Iron	ug/L	171	1000	1000	1160	1170	99	100	70-130	.5	20		
Lead	ug/L	3.6	80	80	82.6	82.6	99	99	70-130	.05	20		
Magnesium	ug/L	20300	1000	1000	21500	21900	114	155	70-130	2	20	M6	
Manganese	ug/L	29.5	80	80	108	111	98	102	70-130	3	20		
Molybdenum	ug/L	9.2	80	80	89.3	87.4	100	98	70-130	2	20		
Nickel	ug/L	0.61	80	80	84.1	80.7	104	100	70-130	4	20		
Potassium	ug/L	2240	1000	1000	3170	3280	94	104	70-130	3	20		
Selenium	ug/L	12.4	80	80	96.8	90.0	106	97	70-130	7	20		
Silica	ug/L	12900	2140	2140	14700	15300	81	110	70-130	4	20		
Silver	ug/L	ND	80	80	80.3	81.2	100	102	70-130	1	20		
Sodium	ug/L	11900	1000	1000	12500	12800	65	91	70-130	2	20	M6	
Thallium	ug/L	ND	80	80	78.7	80.3	98	100	70-130	2	20		
Total Hardness by 2340B	ug/L	676000	6620	6620	687000	700000	165	368	70-130	2	20	M1	
Vanadium	ug/L	0.27	80	80	80.4	80.5	100	100	70-130	.2	20		
Zinc	ug/L	775	80	80	850	868	95	117	70-130	2	20		

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch: MPRP/36287 Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713025, 60131713027, 60131713028

METHOD BLANK: 1328206 Matrix: Water

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713025, 60131713027, 60131713028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	4.0	11/08/12 14:36	
Antimony	ug/L	ND	0.50	11/08/12 14:36	
Arsenic	ug/L	ND	0.50	11/08/12 14:36	
Barium	ug/L	ND	0.30	11/08/12 14:36	
Beryllium	ug/L	ND	0.20	11/08/12 14:36	
Cadmium	ug/L	ND	0.080	11/08/12 14:36	
Calcium	ug/L	ND	20.0	11/08/12 14:36	
Chromium	ug/L	ND	0.50	11/08/12 14:36	
Cobalt	ug/L	ND	0.50	11/08/12 14:36	
Copper	ug/L	ND	0.50	11/08/12 14:36	
Iron	ug/L	ND	50.0	11/08/12 14:36	
Lead	ug/L	ND	0.10	11/08/12 14:36	
Magnesium	ug/L	ND	5.0	11/08/12 14:36	
Manganese	ug/L	ND	0.50	11/08/12 14:36	
Molybdenum	ug/L	ND	0.50	11/08/12 14:36	
Nickel	ug/L	ND	0.50	11/08/12 14:36	
Potassium	ug/L	ND	20.0	11/08/12 14:36	
Selenium	ug/L	ND	0.50	11/08/12 14:36	
Silica	ug/L	ND	53.5	11/08/12 14:36	
Silver	ug/L	ND	0.50	11/08/12 14:36	
Sodium	ug/L	ND	50.0	11/08/12 14:36	
Thallium	ug/L	ND	0.10	11/08/12 14:36	
Total Hardness by 2340B	ug/L	ND	71.0	11/08/12 14:36	
Vanadium	ug/L	ND	0.10	11/08/12 14:36	
Zinc	ug/L	ND	5.0	11/08/12 14:36	

LABORATORY CONTROL SAMPLE: 1328207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	80.0	100	85-115	
Antimony	ug/L	80	78.8	98	85-115	
Arsenic	ug/L	80	78.8	98	85-115	
Barium	ug/L	80	80.4	101	85-115	
Beryllium	ug/L	80	82.0	103	85-115	
Cadmium	ug/L	80	81.8	102	85-115	
Calcium	ug/L	1000	1010	101	85-115	
Chromium	ug/L	80	79.7	100	85-115	
Cobalt	ug/L	80	80.2	100	85-115	
Copper	ug/L	80	82.8	104	85-115	
Iron	ug/L	1000	1020	102	85-115	
Lead	ug/L	80	80.4	100	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1328207

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	1000	1020	102	85-115	
Manganese	ug/L	80	78.5	98	85-115	
Molybdenum	ug/L	80	79.4	99	85-115	
Nickel	ug/L	80	82.5	103	85-115	
Potassium	ug/L	1000	998	100	85-115	
Selenium	ug/L	80	79.3	99	85-115	
Silica	ug/L	2140	2120	99	85-115	
Silver	ug/L	80	81.6	102	85-115	
Sodium	ug/L	1000	1020	102	85-115	
Thallium	ug/L	80	82.6	103	85-115	
Total Hardness by 2340B	ug/L	6620	6700	101	85-115	
Vanadium	ug/L	80	78.7	98	85-115	
Zinc	ug/L	80	81.8	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1328208 1328209

Parameter	Units	MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		60131713028	Result	Conc.	Conc.								
Aluminum	ug/L	184	80	80	268	288	105	129	70-130	7	20		
Antimony	ug/L	ND	80	80	78.1	81.8	98	102	70-130	5	20		
Arsenic	ug/L	3.8	80	80	84.0	85.8	100	103	70-130	2	20		
Barium	ug/L	13.4	80	80	92.1	99.6	98	108	70-130	8	20		
Beryllium	ug/L	0.38	80	80	81.9	82.7	102	103	70-130	1	20		
Cadmium	ug/L	0.29	80	80	81.4	85.5	101	106	70-130	5	20		
Calcium	ug/L	238000	1000	1000	235000	252000	-255	1440	70-130	7	20	E,M6	
Chromium	ug/L	ND	80	80	82.0	85.2	102	106	70-130	4	20		
Cobalt	ug/L	2.4	80	80	84.2	88.0	102	107	70-130	4	20		
Copper	ug/L	1.9	80	80	86.0	89.3	105	109	70-130	4	20		
Iron	ug/L	6030	1000	1000	7040	7440	100	141	70-130	6	20	M6	
Lead	ug/L	1.7	80	80	80.8	85.5	99	105	70-130	6	20		
Magnesium	ug/L	31900	1000	1000	32600	34500	68	260	70-130	6	20	M6	
Manganese	ug/L	5360	80	80	5380	5690	22	416	70-130	6	20	E,M6	
Molybdenum	ug/L	4.9	80	80	85.9	91.6	101	108	70-130	6	20		
Nickel	ug/L	2.5	80	80	87.2	89.0	106	108	70-130	2	20		
Potassium	ug/L	4580	1000	1000	5560	5940	99	137	70-130	7	20	M6	
Selenium	ug/L	ND	80	80	77.8	82.9	97	103	70-130	6	20		
Silica	ug/L	13700	2140	2140	15900	16700	104	140	70-130	5	20	M1	
Silver	ug/L	ND	80	80	77.1	82.8	96	104	70-130	7	20		
Sodium	ug/L	5120	1000	1000	6000	6450	88	133	70-130	7	20	M6	
Thallium	ug/L	ND	80	80	81.8	86.7	102	108	70-130	6	20		
Total Hardness by 2340B	ug/L	726000	6620	6620	722000	772000	-54	703	70-130	7	20	M1	
Vanadium	ug/L	ND	80	80	80.0	85.0	100	106	70-130	6	20		
Zinc	ug/L	601	80	80	686	720	106	148	70-130	5	20	M6	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLE
Pace Project No.: 60131713

QC Batch: MPRP/36414 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET
Associated Lab Samples: 60131713030

METHOD BLANK: 1332086 Matrix: Water

Associated Lab Samples: 60131713030

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Aluminum	ug/L	2.7J	4.0	11/16/12 04:15	
Antimony	ug/L	ND	0.50	11/16/12 04:15	
Arsenic	ug/L	ND	0.50	11/16/12 04:15	
Barium	ug/L	ND	0.30	11/16/12 04:15	
Beryllium	ug/L	ND	0.20	11/16/12 04:15	
Cadmium	ug/L	ND	0.080	11/16/12 04:15	
Calcium	ug/L	10.9J	20.0	11/16/12 04:15	
Chromium	ug/L	ND	0.50	11/16/12 04:15	
Cobalt	ug/L	ND	0.50	11/16/12 04:15	
Copper	ug/L	22.1	0.50	11/16/12 04:15	P8
Iron	ug/L	ND	50.0	11/16/12 04:15	
Lead	ug/L	0.99	0.10	11/16/12 04:15	P8
Magnesium	ug/L	ND	5.0	11/16/12 04:15	
Manganese	ug/L	ND	0.50	11/16/12 04:15	
Molybdenum	ug/L	ND	0.50	11/16/12 04:15	
Nickel	ug/L	ND	0.50	11/16/12 04:15	
Potassium	ug/L	16.8J	20.0	11/16/12 04:15	
Selenium	ug/L	ND	0.50	11/16/12 04:15	
Silica	ug/L	ND	53.5	11/16/12 04:15	
Silver	ug/L	ND	0.50	11/16/12 04:15	
Sodium	ug/L	ND	50.0	11/16/12 04:15	
Thallium	ug/L	ND	0.10	11/16/12 04:15	
Total Hardness by 2340B	ug/L	ND	71.0	11/16/12 04:15	
Vanadium	ug/L	ND	0.10	11/16/12 04:15	
Zinc	ug/L	13.9	5.0	11/16/12 04:15	P8

LABORATORY CONTROL SAMPLE: 1332087

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	78.0	98	85-115	
Antimony	ug/L	80	78.1	98	85-115	
Arsenic	ug/L	80	78.3	98	85-115	
Barium	ug/L	80	78.6	98	85-115	
Beryllium	ug/L	80	82.5	103	85-115	
Cadmium	ug/L	80	80.2	100	85-115	
Calcium	ug/L	1000	964	96	85-115	
Chromium	ug/L	80	78.2	98	85-115	
Cobalt	ug/L	80	78.5	98	85-115	
Copper	ug/L	80	79.6	100	85-115	
Iron	ug/L	1000	1010	101	85-115	
Lead	ug/L	80	80.3	100	85-115	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1332087

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	1000	994	99	85-115	
Manganese	ug/L	80	79.0	99	85-115	
Molybdenum	ug/L	80	77.1	96	85-115	
Nickel	ug/L	80	80.0	100	85-115	
Potassium	ug/L	1000	1000	100	85-115	
Selenium	ug/L	80	81.0	101	85-115	
Silica	ug/L	2140	2080	97	85-115	
Silver	ug/L	80	80.1	100	85-115	
Sodium	ug/L	1000	1020	102	85-115	
Thallium	ug/L	80	81.0	101	85-115	
Total Hardness by 2340B	ug/L	6620	6500	98	85-115	
Vanadium	ug/L	80	79.0	99	85-115	
Zinc	ug/L	80	81.5	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1332088 1332089

Parameter	Units	MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		10210196001	Conc.	Conc.	Result								
Aluminum	ug/L	48.3	80	80	166	166	147	147	147	70-130	.2	20	M6
Antimony	ug/L	ND	80	80	78.6	76.5	98	95	95	70-130	3	20	
Arsenic	ug/L	14.9	80	80	92.5	94.6	97	100	100	70-130	2	20	
Barium	ug/L	18.5	80	80	99.3	98.3	101	100	100	70-130	1	20	
Beryllium	ug/L	ND	80	80	82.9	79.6	104	100	100	70-130	4	20	
Cadmium	ug/L	ND	80	80	83.2	79.4	104	99	99	70-130	5	20	
Calcium	ug/L	33.8	1000	1000	35700	35200	191	140	140	70-130	1	20	M6
Chromium	ug/L	ND	80	80	78.4	76.4	98	95	95	70-130	3	20	
Cobalt	ug/L	ND	80	80	79.5	77.8	99	97	97	70-130	2	20	
Copper	ug/L	ND	80	80	81.6	78.3	101	97	97	70-130	4	20	
Iron	ug/L	1.5	1000	1000	2620	2580	108	104	104	70-130	1	20	
Lead	ug/L	ND	80	80	78.8	78.1	98	97	97	70-130	.9	20	
Magnesium	ug/L	35.2	1000	1000	36400	36600	115	136	136	70-130	.6	20	M6
Manganese	ug/L	0.058	80	80	136	135	97	96	96	70-130	.7	20	
Molybdenum	ug/L	4.7	80	80	83.6	82.6	99	97	97	70-130	1	20	
Nickel	ug/L	ND	80	80	82.8	77.9	103	97	97	70-130	6	20	
Potassium	ug/L	4.6	1000	1000	5750	5740	112	111	111	70-130	.2	20	
Selenium	ug/L	ND	80	80	76.0	77.1	95	96	96	70-130	1	20	
Silica	ug/L	9290	2140	2140	11700	11400	113	99	99	70-130	3	20	
Silver	ug/L	ND	80	80	72.0	72.0	90	90	90	70-130	.1	20	
Sodium	ug/L	364	1000	1000	385000	385000	2040	2060	2060	70-130	.03	20	E,M6
Thallium	ug/L	ND	80	80	79.3	78.9	99	99	99	70-130	.5	20	
Total Hardness by 2340B	ug/L	229000	6620	6620	239000	238000	144	138	138	70-130	.2	20	M1
Vanadium	ug/L	ND	80	80	80.4	77.6	100	97	97	70-130	4	20	
Zinc	ug/L	99.1	80	80	181	179	102	100	100	70-130	.7	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/36001	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 MET Dissolved
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK: 1319512 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	4.0	11/04/12 00:43	
Antimony, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Arsenic, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Barium, Dissolved	ug/L	ND	0.30	11/04/12 00:43	
Beryllium, Dissolved	ug/L	ND	0.20	11/04/12 00:43	
Cadmium, Dissolved	ug/L	ND	0.080	11/04/12 00:43	
Calcium, Dissolved	ug/L	ND	20.0	11/04/12 00:43	
Chromium, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Cobalt, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Copper, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Iron, Dissolved	ug/L	ND	50.0	11/04/12 00:43	
Lead, Dissolved	ug/L	ND	0.10	11/04/12 00:43	
Magnesium, Dissolved	ug/L	ND	5.0	11/04/12 00:43	
Manganese, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Molybdenum, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Nickel, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Potassium, Dissolved	ug/L	ND	20.0	11/04/12 00:43	
Selenium, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Silver, Dissolved	ug/L	ND	0.50	11/04/12 00:43	
Sodium, Dissolved	ug/L	ND	50.0	11/04/12 00:43	
Thallium, Dissolved	ug/L	ND	0.10	11/04/12 00:43	
Vanadium, Dissolved	ug/L	ND	0.10	11/04/12 00:43	
Zinc, Dissolved	ug/L	ND	5.0	11/04/12 00:43	

LABORATORY CONTROL SAMPLE: 1319513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	80	85.9	107	85-115	
Antimony, Dissolved	ug/L	80	81.5	102	85-115	
Arsenic, Dissolved	ug/L	80	81.0	101	85-115	
Barium, Dissolved	ug/L	80	84.1	105	85-115	
Beryllium, Dissolved	ug/L	80	82.2	103	85-115	
Cadmium, Dissolved	ug/L	80	83.7	105	85-115	
Calcium, Dissolved	ug/L	1000	1040	104	85-115	
Chromium, Dissolved	ug/L	80	82.6	103	85-115	
Cobalt, Dissolved	ug/L	80	82.0	103	85-115	
Copper, Dissolved	ug/L	80	86.0	107	85-115	
Iron, Dissolved	ug/L	1000	1040	104	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1319513

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead, Dissolved	ug/L	80	83.2	104	85-115	
Magnesium, Dissolved	ug/L	1000	1040	104	85-115	
Manganese, Dissolved	ug/L	80	80.0	100	85-115	
Molybdenum, Dissolved	ug/L	80	79.3	99	85-115	
Nickel, Dissolved	ug/L	80	81.4	102	85-115	
Potassium, Dissolved	ug/L	1000	1040	104	85-115	
Selenium, Dissolved	ug/L	80	83.7	105	85-115	
Silver, Dissolved	ug/L	80	82.6	103	85-115	
Sodium, Dissolved	ug/L	1000	1040	104	85-115	
Thallium, Dissolved	ug/L	80	81.9	102	85-115	
Vanadium, Dissolved	ug/L	80	80.7	101	85-115	
Zinc, Dissolved	ug/L	80	83.6	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1319514 1319515

Parameter	Units	MS 60131713001		MSD Spike Conc.		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Conc.	Result								
Aluminum, Dissolved	ug/L	ND	80	80	91.6	90.4	-24	110	108	70-130	1	20	
Antimony, Dissolved	ug/L	2.4	80	80	84.7	84.7	103	103	103	70-130	0	20	
Arsenic, Dissolved	ug/L	ND	80	80	80.7	84.5	100	100	105	70-130	5	20	
Barium, Dissolved	ug/L	74.9	80	80	152	155	97	100	100	70-130	2	20	
Beryllium, Dissolved	ug/L	ND	80	80	80.2	82.6	100	100	103	70-130	3	20	
Cadmium, Dissolved	ug/L	ND	80	80	82.2	85.8	103	103	107	70-130	4	20	
Calcium, Dissolved	ug/L	50200	1000	1000	50000	50800	-24	60	70-130	2	20	M1	
Chromium, Dissolved	ug/L	ND	80	80	81.6	82.6	102	102	103	70-130	1	20	
Cobalt, Dissolved	ug/L	ND	80	80	81.8	84.3	102	102	105	70-130	3	20	
Copper, Dissolved	ug/L	0.94	80	80	82.7	85.4	102	102	106	70-130	3	20	
Iron, Dissolved	ug/L	ND	1000	1000	1040	1060	102	102	105	70-130	2	20	
Lead, Dissolved	ug/L	ND	80	80	80.2	81.2	100	100	101	70-130	1	20	
Magnesium, Dissolved	ug/L	6970	1000	1000	7920	8060	95	95	109	70-130	2	20	
Manganese, Dissolved	ug/L	16.8	80	80	96.0	99.1	99	99	103	70-130	3	20	
Molybdenum, Dissolved	ug/L	0.91	80	80	82.1	83.6	101	101	103	70-130	2	20	
Nickel, Dissolved	ug/L	2.2	80	80	86.8	88.1	106	106	107	70-130	1	20	
Potassium, Dissolved	ug/L	726	1000	1000	1730	1750	100	100	103	70-130	1	20	
Selenium, Dissolved	ug/L	ND	80	80	80.3	80.4	100	100	100	70-130	.06	20	
Silver, Dissolved	ug/L	ND	80	80	82.6	85.4	103	103	107	70-130	3	20	
Sodium, Dissolved	ug/L	2760	1000	1000	3740	3800	98	98	104	70-130	2	20	
Thallium, Dissolved	ug/L	ND	80	80	81.6	83.2	102	102	104	70-130	2	20	
Vanadium, Dissolved	ug/L	ND	80	80	82.2	84.1	103	103	105	70-130	2	20	
Zinc, Dissolved	ug/L	ND	80	80	88.5	92.9	106	106	111	70-130	5	20	

MATRIX SPIKE SAMPLE: 1319516

Parameter	Units	60131713011	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	6.3	80	94.0	110	70-130	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

MATRIX SPIKE SAMPLE: 1319516

Parameter	Units	60131713011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony, Dissolved	ug/L	ND	80	82.4	103	70-130	
Arsenic, Dissolved	ug/L	ND	80	81.6	102	70-130	
Barium, Dissolved	ug/L	ND	80	82.4	103	70-130	
Beryllium, Dissolved	ug/L	ND	80	80.4	101	70-130	
Cadmium, Dissolved	ug/L	ND	80	85.2	106	70-130	
Calcium, Dissolved	ug/L	90.5	1000	1140	105	70-130	
Chromium, Dissolved	ug/L	ND	80	83.0	104	70-130	
Cobalt, Dissolved	ug/L	ND	80	84.2	105	70-130	
Copper, Dissolved	ug/L	0.64	80	84.9	105	70-130	
Iron, Dissolved	ug/L	ND	1000	1050	104	70-130	
Lead, Dissolved	ug/L	ND	80	81.2	101	70-130	
Magnesium, Dissolved	ug/L	19.5	1000	1090	107	70-130	
Manganese, Dissolved	ug/L	0.70	80	82.2	102	70-130	
Molybdenum, Dissolved	ug/L	ND	80	81.2	102	70-130	
Nickel, Dissolved	ug/L	0.73	80	85.8	106	70-130	
Potassium, Dissolved	ug/L	71.1	1000	1090	101	70-130	
Selenium, Dissolved	ug/L	ND	80	79.8	100	70-130	
Silver, Dissolved	ug/L	ND	80	85.0	106	70-130	
Sodium, Dissolved	ug/L	378	1000	1400	102	70-130	
Thallium, Dissolved	ug/L	ND	80	82.1	103	70-130	
Vanadium, Dissolved	ug/L	ND	80	81.1	101	70-130	
Zinc, Dissolved	ug/L	ND	80	87.4	106	70-130	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/36002	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 MET Dissolved
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029		

METHOD BLANK: 1319517 Matrix: Water

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027,
60131713028, 60131713029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	4.0	11/06/12 16:46	
Antimony, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Arsenic, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Barium, Dissolved	ug/L	ND	0.30	11/06/12 03:31	
Beryllium, Dissolved	ug/L	ND	0.20	11/06/12 03:31	
Cadmium, Dissolved	ug/L	ND	0.080	11/06/12 03:31	
Calcium, Dissolved	ug/L	ND	20.0	11/06/12 03:31	
Chromium, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Cobalt, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Copper, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Iron, Dissolved	ug/L	ND	50.0	11/06/12 03:31	
Lead, Dissolved	ug/L	ND	0.10	11/06/12 03:31	
Magnesium, Dissolved	ug/L	ND	5.0	11/06/12 16:46	
Manganese, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Molybdenum, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Nickel, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Potassium, Dissolved	ug/L	ND	20.0	11/06/12 03:31	
Selenium, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Silver, Dissolved	ug/L	ND	0.50	11/06/12 03:31	
Sodium, Dissolved	ug/L	ND	50.0	11/06/12 03:31	
Thallium, Dissolved	ug/L	ND	0.10	11/06/12 03:31	
Vanadium, Dissolved	ug/L	ND	0.10	11/06/12 03:31	
Zinc, Dissolved	ug/L	ND	5.0	11/06/12 03:31	

LABORATORY CONTROL SAMPLE: 1319518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	80	88.4	110	85-115	
Antimony, Dissolved	ug/L	80	80.0	100	85-115	
Arsenic, Dissolved	ug/L	80	81.0	101	85-115	
Barium, Dissolved	ug/L	80	81.6	102	85-115	
Beryllium, Dissolved	ug/L	80	85.1	106	85-115	
Cadmium, Dissolved	ug/L	80	82.4	103	85-115	
Calcium, Dissolved	ug/L	1000	1120	112	85-115	
Chromium, Dissolved	ug/L	80	84.3	105	85-115	
Cobalt, Dissolved	ug/L	80	83.0	104	85-115	
Copper, Dissolved	ug/L	80	83.7	105	85-115	
Iron, Dissolved	ug/L	1000	1060	106	85-115	
Lead, Dissolved	ug/L	80	82.3	103	85-115	
Magnesium, Dissolved	ug/L	1000	1020	102	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1319518

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese, Dissolved	ug/L	80	83.4	104	85-115	
Molybdenum, Dissolved	ug/L	80	79.6	100	85-115	
Nickel, Dissolved	ug/L	80	83.6	104	85-115	
Potassium, Dissolved	ug/L	1000	1010	101	85-115	
Selenium, Dissolved	ug/L	80	80.4	100	85-115	
Silver, Dissolved	ug/L	80	83.0	104	85-115	
Sodium, Dissolved	ug/L	1000	1070	107	85-115	
Thallium, Dissolved	ug/L	80	82.1	103	85-115	
Vanadium, Dissolved	ug/L	80	80.2	100	85-115	
Zinc, Dissolved	ug/L	80	83.3	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1319519 1319520

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60131713021	Result	Spike Conc.	MS Result						
Aluminum, Dissolved	ug/L	11.4	80	80	109	98.3	122	109	70-130	10	20
Antimony, Dissolved	ug/L	ND	80	80	80.2	79.4	100	99	70-130	1	20
Arsenic, Dissolved	ug/L	ND	80	80	81.9	80.8	102	101	70-130	1	20
Barium, Dissolved	ug/L	17.1	80	80	98.2	95.8	101	98	70-130	2	20
Beryllium, Dissolved	ug/L	ND	80	80	86.0	86.5	108	108	70-130	.5	20
Cadmium, Dissolved	ug/L	2.0	80	80	84.9	84.2	104	103	70-130	.9	20
Calcium, Dissolved	ug/L	249000	1000	1000	246000	240000	-240	-870	70-130	3	20 E,M6
Chromium, Dissolved	ug/L	ND	80	80	80.8	81.6	101	102	70-130	.9	20
Cobalt, Dissolved	ug/L	ND	80	80	81.9	79.6	102	99	70-130	3	20
Copper, Dissolved	ug/L	2.2	80	80	85.1	82.0	104	100	70-130	4	20
Iron, Dissolved	ug/L	ND	1000	1000	1020	998	100	98	70-130	3	20
Lead, Dissolved	ug/L	0.42	80	80	81.5	79.8	101	99	70-130	2	20
Magnesium, Dissolved	ug/L	20400	1000	1000	21800	22100	134	165	70-130	1	20 M6
Manganese, Dissolved	ug/L	8.4	80	80	90.6	87.2	103	99	70-130	4	20
Molybdenum, Dissolved	ug/L	9.4	80	80	89.5	87.1	100	97	70-130	3	20
Nickel, Dissolved	ug/L	1.4	80	80	83.9	82.3	103	101	70-130	2	20
Potassium, Dissolved	ug/L	2260	1000	1000	3310	3200	105	95	70-130	3	20
Selenium, Dissolved	ug/L	12.9	80	80	95.2	95.9	103	104	70-130	.7	20
Silver, Dissolved	ug/L	ND	80	80	78.9	78.7	99	98	70-130	.3	20
Sodium, Dissolved	ug/L	12000	1000	1000	12900	13000	94	105	70-130	.8	20
Thallium, Dissolved	ug/L	ND	80	80	81.1	79.8	101	100	70-130	2	20
Vanadium, Dissolved	ug/L	0.16	80	80	80.4	78.8	100	98	70-130	2	20
Zinc, Dissolved	ug/L	754	80	80	839	828	106	92	70-130	1	20

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLE
Pace Project No.: 60131713

QC Batch: MPRP/36546 Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 Analysis Description: 200.8 MET Dissolved
Associated Lab Samples: 60131713030

METHOD BLANK: 1338643 Matrix: Water

Associated Lab Samples: 60131713030

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Aluminum, Dissolved	ug/L	2.4J	4.0	11/29/12 19:45	
Antimony, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Arsenic, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Barium, Dissolved	ug/L	ND	0.30	11/29/12 19:45	
Beryllium, Dissolved	ug/L	ND	0.20	11/29/12 19:45	
Cadmium, Dissolved	ug/L	ND	0.080	11/29/12 19:45	
Calcium, Dissolved	ug/L	ND	20.0	11/29/12 19:45	
Chromium, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Cobalt, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Copper, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Iron, Dissolved	ug/L	ND	50.0	11/29/12 19:45	
Lead, Dissolved	ug/L	0.031J	0.10	11/29/12 19:45	
Magnesium, Dissolved	ug/L	2.9J	5.0	11/29/12 19:45	
Manganese, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Molybdenum, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Nickel, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Potassium, Dissolved	ug/L	ND	20.0	11/29/12 19:45	
Selenium, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Silver, Dissolved	ug/L	ND	0.50	11/29/12 19:45	
Sodium, Dissolved	ug/L	13.6J	50.0	11/29/12 19:45	
Thallium, Dissolved	ug/L	ND	0.10	11/29/12 19:45	
Vanadium, Dissolved	ug/L	ND	0.10	11/29/12 19:45	
Zinc, Dissolved	ug/L	1.4J	5.0	11/29/12 19:45	

LABORATORY CONTROL SAMPLE: 1338644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	80	82.8	103	85-115	
Antimony, Dissolved	ug/L	80	83.0	104	85-115	
Arsenic, Dissolved	ug/L	80	82.7	103	85-115	
Barium, Dissolved	ug/L	80	84.0	105	85-115	
Beryllium, Dissolved	ug/L	80	85.3	107	85-115	
Cadmium, Dissolved	ug/L	80	86.4	108	85-115	
Calcium, Dissolved	ug/L	1000	1070	107	85-115	
Chromium, Dissolved	ug/L	80	88.5	111	85-115	
Cobalt, Dissolved	ug/L	80	83.6	104	85-115	
Copper, Dissolved	ug/L	80	86.7	108	85-115	
Iron, Dissolved	ug/L	1000	1080	108	85-115	
Lead, Dissolved	ug/L	80	83.9	105	85-115	
Magnesium, Dissolved	ug/L	1000	1070	107	85-115	
Manganese, Dissolved	ug/L	80	84.8	106	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1338644

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum, Dissolved	ug/L	80	83.4	104	85-115	
Nickel, Dissolved	ug/L	80	85.0	106	85-115	
Potassium, Dissolved	ug/L	1000	1030	103	85-115	
Selenium, Dissolved	ug/L	80	83.8	105	85-115	
Silver, Dissolved	ug/L	80	82.9	104	85-115	
Sodium, Dissolved	ug/L	1000	994	99	85-115	
Thallium, Dissolved	ug/L	80	83.2	104	85-115	
Vanadium, Dissolved	ug/L	80	87.6	109	85-115	
Zinc, Dissolved	ug/L	80	84.6	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1338645 1338646

Parameter	Units	MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		60131713030	Result	Conc.	Conc.								
Aluminum, Dissolved	ug/L	6260	80	80	6610	6420	439	208	70-130	3	20	M6	
Antimony, Dissolved	ug/L	10.1	80	80	94.6	94.0	106	105	70-130	.6	20		
Arsenic, Dissolved	ug/L	20.6	80	80	104	101	104	100	70-130	3	20		
Barium, Dissolved	ug/L	32.5	80	80	119	120	108	109	70-130	1	20		
Beryllium, Dissolved	ug/L	5.1	80	80	92.2	89.8	109	106	70-130	3	20		
Cadmium, Dissolved	ug/L	31.9	80	80	128	122	120	113	70-130	5	20		
Calcium, Dissolved	ug/L	209000	1000	1000	217000	213000	818	418	70-130	2	20	M6	
Chromium, Dissolved	ug/L	171	80	80	268	259	121	110	70-130	3	20		
Cobalt, Dissolved	ug/L	5.2	80	80	89.6	87.4	105	103	70-130	2	20		
Copper, Dissolved	ug/L	1320	80	80	1450	1400	170	108	70-130	4	20	M6	
Iron, Dissolved	ug/L	120000	1000	1000	124000	122000	452	172	70-130	2	20	M6	
Lead, Dissolved	ug/L	428	80	80	551	524	154	120	70-130	5	20	M6	
Magnesium, Dissolved	ug/L	20700	1000	1000	22300	21900	162	116	70-130	2	20	M6	
Manganese, Dissolved	ug/L	2800	80	80	2980	2920	229	153	70-130	2	20	M6	
Molybdenum, Dissolved	ug/L	92.1	80	80	185	185	116	116	70-130	.05	20		
Nickel, Dissolved	ug/L	18.8	80	80	107	100	110	102	70-130	6	20		
Potassium, Dissolved	ug/L	28800	1000	1000	30200	29500	138	72	70-130	2	20	M6	
Selenium, Dissolved	ug/L	1.6	80	80	83.5	81.4	102	100	70-130	3	20		
Silver, Dissolved	ug/L	3.8	80	80	81.7	82.4	97	98	70-130	.8	20		
Sodium, Dissolved	ug/L	11300	1000	1000	12400	12000	106	73	70-130	3	20		
Thallium, Dissolved	ug/L	0.13	80	80	83.4	82.9	104	103	70-130	.6	20		
Vanadium, Dissolved	ug/L	2.6	80	80	91.3	90.7	111	110	70-130	.7	20		
Zinc, Dissolved	ug/L	4700	80	80	4910	4750	264	59	70-130	3	20	E,M6	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/20183	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 Potentially Dissolved Metals
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019		

METHOD BLANK: 1087080 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007,
60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014,
60131713015, 60131713016, 60131713017, 60131713018, 60131713019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	50.0	11/05/12 13:31	
Antimony, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Arsenic, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Barium, Dissolved	ug/L	0.18J	1.0	10/31/12 18:05	
Beryllium, Dissolved	ug/L	ND	0.50	11/05/12 13:31	
Cadmium, Dissolved	ug/L	ND	0.50	10/31/12 18:05	
Chromium, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Cobalt, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Copper, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Iron, Dissolved	ug/L	ND	50.0	10/31/12 18:05	
Lead, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Manganese, Dissolved	ug/L	0.52J	1.0	10/31/12 18:05	
Molybdenum, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Nickel, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Selenium, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Silver, Dissolved	ug/L	ND	0.50	10/31/12 18:05	
Thallium, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Vanadium, Dissolved	ug/L	ND	1.0	10/31/12 18:05	
Zinc, Dissolved	ug/L	1.9J	10.0	10/31/12 18:05	

LABORATORY CONTROL SAMPLE: 1087081

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	1000	1050	105	85-115	
Antimony, Dissolved	ug/L	40	40.6	102	85-115	
Arsenic, Dissolved	ug/L	40	39.6	99	85-115	
Barium, Dissolved	ug/L	40	38.9	97	85-115	
Beryllium, Dissolved	ug/L	40	43.0	108	85-115	
Cadmium, Dissolved	ug/L	40	40.2	100	85-115	
Chromium, Dissolved	ug/L	40	39.4	98	85-115	
Cobalt, Dissolved	ug/L	40	38.0	95	85-115	
Copper, Dissolved	ug/L	40	38.4	96	85-115	
Iron, Dissolved	ug/L	1000	981	98	85-115	
Lead, Dissolved	ug/L	40	39.5	99	85-115	
Manganese, Dissolved	ug/L	40	39.4	98	85-115	
Molybdenum, Dissolved	ug/L	40	40.5	101	85-115	
Nickel, Dissolved	ug/L	40	38.1	95	85-115	
Selenium, Dissolved	ug/L	40	40.2	100	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1087081

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Silver, Dissolved	ug/L	20	19.7	99	85-115	
Thallium, Dissolved	ug/L	40	38.0	95	85-115	
Vanadium, Dissolved	ug/L	40	39.0	98	85-115	
Zinc, Dissolved	ug/L	100	106	106	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1087082 1087083

Parameter	Units	MS		MSD		MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		60131713002	Spiked Conc.	Spiked Conc.	MS Result							
Aluminum, Dissolved	ug/L	9.7J	1000	1000	1010	1030	100	102	70-130	2	20	
Antimony, Dissolved	ug/L	0.074J	40	40	39.1	40.2	98	100	70-130	3	20	
Arsenic, Dissolved	ug/L	0.31J	40	40	37.6	38.3	93	95	70-130	2	20	
Barium, Dissolved	ug/L	74.6	40	40	104	109	74	85	70-130	4	20	
Beryllium, Dissolved	ug/L	ND	40	40	40.3	41.6	101	104	70-130	3	20	
Cadmium, Dissolved	ug/L	ND	40	40	38.1	39.2	95	98	70-130	3	20	
Chromium, Dissolved	ug/L	0.80J	40	40	39.1	39.6	96	97	70-130	1	20	
Cobalt, Dissolved	ug/L	0.10J	40	40	36.2	36.8	90	92	70-130	2	20	
Copper, Dissolved	ug/L	1.1	40	40	35.6	36.5	86	89	70-130	2	20	
Iron, Dissolved	ug/L	84.8	1000	1000	1030	1070	95	99	70-130	4	20	
Lead, Dissolved	ug/L	0.72J	40	40	39.8	40.8	98	100	70-130	3	20	
Manganese, Dissolved	ug/L	291	40	40	311	329	52	96	70-130	5	20	M1
Molybdenum, Dissolved	ug/L	1.5	40	40	43.3	44.7	105	108	70-130	3	20	
Nickel, Dissolved	ug/L	0.37J	40	40	35.4	36.4	88	90	70-130	3	20	
Selenium, Dissolved	ug/L	0.38J	40	40	36.0	36.2	89	90	70-130	1	20	
Silver, Dissolved	ug/L	ND	20	20	19.1	19.4	95	97	70-130	2	20	
Thallium, Dissolved	ug/L	ND	40	40	38.3	39.4	96	98	70-130	3	20	
Vanadium, Dissolved	ug/L	ND	40	40	38.4	39.1	95	97	70-130	2	20	
Zinc, Dissolved	ug/L	23.0	100	100	108	113	85	90	70-130	5	20	

MATRIX SPIKE SAMPLE: 1087084

Parameter	Units	60131713011		Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
		Result	Conc.					
Aluminum, Dissolved	ug/L	ND	1000	1000	1020	101	70-130	
Antimony, Dissolved	ug/L	ND	40	40	40.1	100	70-130	
Arsenic, Dissolved	ug/L	ND	40	40	37.6	94	70-130	
Barium, Dissolved	ug/L	0.78J	40	40	39.9	98	70-130	
Beryllium, Dissolved	ug/L	ND	40	40	42.0	105	70-130	
Cadmium, Dissolved	ug/L	ND	40	40	39.2	98	70-130	
Chromium, Dissolved	ug/L	0.46J	40	40	39.1	96	70-130	
Cobalt, Dissolved	ug/L	ND	40	40	37.4	94	70-130	
Copper, Dissolved	ug/L	ND	40	40	37.6	93	70-130	
Iron, Dissolved	ug/L	15.6J	1000	1000	1010	99	70-130	
Lead, Dissolved	ug/L	0.19J	40	40	39.9	99	70-130	
Manganese, Dissolved	ug/L	2.1	40	40	41.6	99	70-130	
Molybdenum, Dissolved	ug/L	ND	40	40	40.7	102	70-130	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

MATRIX SPIKE SAMPLE: 1087084

Parameter	Units	60131713011 Result	Spike	MS	MS	% Rec	Qualifiers
			Conc.	Result	% Rec	Limits	
Nickel, Dissolved	ug/L	ND	40	38.5	96	70-130	
Selenium, Dissolved	ug/L	ND	40	37.3	93	70-130	
Silver, Dissolved	ug/L	ND	20	19.5	98	70-130	
Thallium, Dissolved	ug/L	ND	40	38.2	95	70-130	
Vanadium, Dissolved	ug/L	ND	40	38.6	96	70-130	
Zinc, Dissolved	ug/L	6.5J	100	103	97	70-130	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/20184	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 Potentially Dissolved Metals
Associated Lab Samples:	60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK: 1087085 Matrix: Water

Associated Lab Samples: 60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Aluminum, Dissolved	ug/L	ND	50.0	11/07/12 10:49	
Antimony, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Arsenic, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Barium, Dissolved	ug/L	0.11J	1.0	10/31/12 20:34	
Beryllium, Dissolved	ug/L	ND	0.50	11/07/12 10:49	
Cadmium, Dissolved	ug/L	ND	0.50	10/31/12 20:34	
Chromium, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Cobalt, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Copper, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Iron, Dissolved	ug/L	ND	50.0	10/31/12 20:34	
Lead, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Manganese, Dissolved	ug/L	ND	1.0	11/07/12 10:49	
Molybdenum, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Nickel, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Selenium, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Silver, Dissolved	ug/L	ND	0.50	10/31/12 20:34	
Thallium, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Vanadium, Dissolved	ug/L	ND	1.0	10/31/12 20:34	
Zinc, Dissolved	ug/L	ND	10.0	10/31/12 20:34	

LABORATORY CONTROL SAMPLE: 1087086

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Aluminum, Dissolved	ug/L	1000	1030	103	85-115	
Antimony, Dissolved	ug/L	40	40.6	102	85-115	
Arsenic, Dissolved	ug/L	40	40.1	100	85-115	
Barium, Dissolved	ug/L	40	38.9	97	85-115	
Beryllium, Dissolved	ug/L	40	41.0	103	85-115	
Cadmium, Dissolved	ug/L	40	39.8	100	85-115	
Chromium, Dissolved	ug/L	40	38.9	97	85-115	
Cobalt, Dissolved	ug/L	40	37.7	94	85-115	
Copper, Dissolved	ug/L	40	38.1	95	85-115	
Iron, Dissolved	ug/L	1000	961	96	85-115	
Lead, Dissolved	ug/L	40	39.2	98	85-115	
Manganese, Dissolved	ug/L	40	40.0	100	85-115	
Molybdenum, Dissolved	ug/L	40	40.1	100	85-115	
Nickel, Dissolved	ug/L	40	38.1	95	85-115	
Selenium, Dissolved	ug/L	40	40.4	101	85-115	
Silver, Dissolved	ug/L	20	19.4	97	85-115	
Thallium, Dissolved	ug/L	40	37.6	94	85-115	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1087086

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vanadium, Dissolved	ug/L	40	38.4	96	85-115	
Zinc, Dissolved	ug/L	100	104	104	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1087087 1087088

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max		
		60131713021	Spike Conc.	MS	MSD Result				RPD	RPD	Qual
Aluminum, Dissolved	ug/L	41.7J	2000	2000	913	950	44	45	70-130	4	20 M1
Antimony, Dissolved	ug/L	0.16J	80	80	39.3	38.5	49	48	70-130	2	20 M1
Arsenic, Dissolved	ug/L	1.2	80	80	38.2	38.5	46	47	70-130	1	20 M1
Barium, Dissolved	ug/L	16.3	80	80	55.0	54.6	48	48	70-130	1	20 M1
Beryllium, Dissolved	ug/L	ND	80	80	32.3	33.7	40	42	70-130	4	20 M1
Cadmium, Dissolved	ug/L	1.9	80	80	38.4	38.7	46	46	70-130	1	20 M1
Chromium, Dissolved	ug/L	1.0	80	80	37.7	37.8	46	46	70-130	0	20 M1
Cobalt, Dissolved	ug/L	0.11J	80	80	34.5	34.8	43	43	70-130	1	20 M1
Copper, Dissolved	ug/L	3.0	80	80	35.6	35.8	41	41	70-130	1	20 M1
Iron, Dissolved	ug/L	150	2000	2000	1060	1060	46	46	70-130	0	20 M1
Lead, Dissolved	ug/L	4.8	80	80	44.3	44.7	49	50	70-130	1	20 M1
Manganese, Dissolved	ug/L	29.4	80	80	68.4	68.2	49	48	70-130	0	20 M1
Molybdenum, Dissolved	ug/L	8.8	80	80	52.0	52.4	54	54	70-130	1	20 M1
Nickel, Dissolved	ug/L	ND	80	80	33.1	32.8	41	41	70-130	1	20 M1
Selenium, Dissolved	ug/L	11.0	80	80	47.0	47.6	45	46	70-130	1	20 M1
Silver, Dissolved	ug/L	ND	40	40	17.6	17.8	44	44	70-130	1	20 M1
Thallium, Dissolved	ug/L	0.059J	80	80	38.7	38.9	48	49	70-130	1	20 M1
Vanadium, Dissolved	ug/L	ND	80	80	37.6	37.2	47	46	70-130	1	20 M1
Zinc, Dissolved	ug/L	624	200	200	698	703	37	40	70-130	1	20 M1

MATRIX SPIKE SAMPLE: 1087089

Parameter	Units	60131713026		MS Result	MS % Rec	% Rec Limits	Qualifiers
		Result	Spike Conc.				
Aluminum, Dissolved	ug/L	32500	2000	31300	-61	70-130	M1
Antimony, Dissolved	ug/L	0.44J	80	36.1	45	70-130	M1
Arsenic, Dissolved	ug/L	220	80	246	32	70-130	M1
Barium, Dissolved	ug/L	8.6	80	42.7	43	70-130	M1
Beryllium, Dissolved	ug/L	7.4	80	41.2	42	70-130	M1
Cadmium, Dissolved	ug/L	174	80	200	33	70-130	M1
Chromium, Dissolved	ug/L	7.6	80	42.0	43	70-130	M1
Cobalt, Dissolved	ug/L	61.6	80	90.9	37	70-130	M1
Copper, Dissolved	ug/L	313	80	330	21	70-130	M1
Iron, Dissolved	ug/L	360000	2000	345000	-735	70-130	M1
Lead, Dissolved	ug/L	4190	80	4030	-200	70-130	M1
Manganese, Dissolved	ug/L	17200	80	16400	-975	70-130	M1
Molybdenum, Dissolved	ug/L	1.2	80	44.3	54	70-130	M1
Nickel, Dissolved	ug/L	103	80	130	33	70-130	M1
Selenium, Dissolved	ug/L	3.8	80	39.7	45	70-130	M1

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

MATRIX SPIKE SAMPLE: 1087089

Parameter	Units	60131713026 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Silver, Dissolved	ug/L	ND	40	16.5	41	70-130	M1
Thallium, Dissolved	ug/L	0.51J	80	35.0	43	70-130	M1
Vanadium, Dissolved	ug/L	5.9	80	41.6	45	70-130	M1
Zinc, Dissolved	ug/L	62800	200	59200	-1825	70-130	M1

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/36091	Analysis Method:	EPA 6020
QC Batch Method:	EPA 3050	Analysis Description:	6020 MET
Associated Lab Samples:	60131714003		

METHOD BLANK: 1321956 Matrix: Solid

Associated Lab Samples: 60131714003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	mg/kg	ND	4.0	11/03/12 22:51	
Antimony	mg/kg	ND	0.50	11/03/12 22:51	
Arsenic	mg/kg	ND	0.50	11/03/12 22:51	
Barium	mg/kg	ND	0.30	11/03/12 22:51	
Beryllium	mg/kg	ND	0.20	11/03/12 22:51	
Cadmium	mg/kg	ND	0.080	11/03/12 22:51	
Calcium	mg/kg	ND	50.0	11/03/12 22:51	
Chromium	mg/kg	ND	0.50	11/03/12 22:51	
Cobalt	mg/kg	ND	0.50	11/03/12 22:51	
Copper	mg/kg	ND	0.50	11/03/12 22:51	
Iron	mg/kg	ND	50.0	11/03/12 22:51	
Lead	mg/kg	0.14	0.10	11/03/12 22:51	P8
Magnesium	mg/kg	ND	5.0	11/03/12 22:51	
Manganese	mg/kg	ND	0.50	11/03/12 22:51	
Molybdenum	mg/kg	ND	0.50	11/03/12 22:51	
Nickel	mg/kg	ND	0.50	11/03/12 22:51	
Potassium	mg/kg	ND	50.0	11/03/12 22:51	
Selenium	mg/kg	ND	0.50	11/03/12 22:51	
Silica	mg/kg	ND	53.5	11/03/12 22:51	
Silver	mg/kg	ND	0.50	11/03/12 22:51	
Sodium	mg/kg	ND	50.0	11/03/12 22:51	
Thallium	mg/kg	ND	0.10	11/03/12 22:51	
Vanadium	mg/kg	ND	0.50	11/03/12 22:51	
Zinc	mg/kg	ND	5.0	11/03/12 22:51	

LABORATORY CONTROL SAMPLE: 1321957

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	19.8	19.0	96	80-120	
Antimony	mg/kg	19.8	16.8	85	80-120	
Arsenic	mg/kg	19.8	16.7	84	80-120	
Barium	mg/kg	19.8	17.3	87	80-120	
Beryllium	mg/kg	19.8	16.0	81	80-120	
Cadmium	mg/kg	19.8	18.5	94	80-120	
Calcium	mg/kg	248	212	86	80-120	
Chromium	mg/kg	19.8	16.7	84	80-120	
Cobalt	mg/kg	19.8	16.6	84	80-120	
Copper	mg/kg	19.8	17.2	87	80-120	
Iron	mg/kg	248	213	86	80-120	
Lead	mg/kg	19.8	17.6	89	80-120	
Magnesium	mg/kg	248	221	89	80-120	

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

LABORATORY CONTROL SAMPLE: 1321957

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Manganese	mg/kg	19.8	16.8	85	80-120	
Molybdenum	mg/kg	19.8	16.8	85	80-120	
Nickel	mg/kg	19.8	16.9	85	80-120	
Potassium	mg/kg	248	225	91	80-120	
Selenium	mg/kg	19.8	16.7	84	80-120	
Silica	mg/kg	530	436	82	80-120	
Silver	mg/kg	19.8	19.3	97	80-120	
Sodium	mg/kg	248	211	85	80-120	
Thallium	mg/kg	19.8	17.7	90	80-120	
Vanadium	mg/kg	19.8	15.9	80	80-120	
Zinc	mg/kg	19.8	18.8	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1321958 1321959

Parameter	Units	10210011003		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max		
		Spk Conc.	Result	Spk Conc.	Result				RPD	RPD	Qual
Aluminum	mg/kg	4510	17.6	18.7	7000	6750	14100	12000	75-125	4	30 M6
Antimony	mg/kg	ND	17.6	18.7	5.8	7.1	32	37	75-125	20	30 M6
Arsenic	mg/kg	4.2	17.6	18.7	15.9	17.2	67	69	75-125	8	30 M6
Barium	mg/kg	91.9	17.6	18.7	121	115	167	124	75-125	5	30 M6
Beryllium	mg/kg	ND	17.6	18.7	10.8	12.2	60	64	75-125	12	30 M6
Cadmium	mg/kg	ND	17.6	18.7	16.5	16.2	93	86	75-125	2	30
Calcium	mg/kg	6960	220	234	8560	7730	726	332	75-125	10	30 M6
Chromium	mg/kg	8.3	17.6	18.7	22.7	23.0	82	79	75-125	1	30
Cobalt	mg/kg	3.5	17.6	18.7	15.0	15.6	65	65	75-125	4	30 M6
Copper	mg/kg	10.0	17.6	18.7	23.7	23.8	77	74	75-125	.6	30 M6
Iron	mg/kg	8570	220	234	10900	9870	1070	559	75-125	10	30 M6
Lead	mg/kg	12.4	17.6	18.7	29.1	28.2	94	85	75-125	3	30
Magnesium	mg/kg	3090	220	234	3980	3770	408	294	75-125	5	30 M6
Manganese	mg/kg	192	17.6	18.7	231	217	223	132	75-125	7	30 M6
Molybdenum	mg/kg	ND	17.6	18.7	12.0	12.9	65	67	75-125	8	30 M6
Nickel	mg/kg	8.1	17.6	18.7	20.0	20.8	68	68	75-125	4	30 M6
Potassium	mg/kg	1130	220	234	1790	1700	297	245	75-125	5	30 M6
Selenium	mg/kg	ND	17.6	18.7	12.1	12.4	66	64	75-125	3	30 M6
Silica	mg/kg	558	470	499	1400	1380	179	165	75-125	2	30 M1
Silver	mg/kg	ND	17.6	18.7	16.5	17.1	92	90	75-125	4	30
Sodium	mg/kg	220	220	234	440	410	100	81	75-125	7	30
Thallium	mg/kg	0.33	17.6	18.7	15.0	15.5	83	81	75-125	3	30
Vanadium	mg/kg	15.6	17.6	18.7	33.2	33.0	100	93	75-125	.5	30
Zinc	mg/kg	262	17.6	18.7	361	286	565	132	75-125	23	30 M6

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MPRP/36105	Analysis Method:	ASTM D2974
QC Batch Method:	ASTM D2974	Analysis Description:	Dry Weight/Percent Moisture
Associated Lab Samples: 60131714003			

SAMPLE DUPLICATE: 1322132

Parameter	Units	10210516002 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	25.2	31.3	22	30	

SAMPLE DUPLICATE: 1322574

Parameter	Units	10210077013 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	8.6	9.8	13	30	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	MT/10548	Analysis Method:	SM 2510B
QC Batch Method:	SM 2510B	Analysis Description:	2510B Specific Conductance
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK: 1321606 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007,
60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014,
60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	10.0	10/29/12 15:43	

LABORATORY CONTROL SAMPLE: 1321607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	1010	101	90-110	

SAMPLE DUPLICATE: 1321608

Parameter	Units	60131713004 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	1330	1360	2	20	

SAMPLE DUPLICATE: 1321609

Parameter	Units	60131713014 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	1560	1510	3	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	MT/10549	Analysis Method:	SM 2510B
QC Batch Method:	SM 2510B	Analysis Description:	2510B Specific Conductance
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK: 1321611 Matrix: Water

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027,
60131713028, 60131713029, 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	10.0	10/29/12 16:21	

LABORATORY CONTROL SAMPLE: 1321612

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	1000	100	90-110	

SAMPLE DUPLICATE: 1321615

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	1370	1380	.8	20	

SAMPLE DUPLICATE: 1321616

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	980	935	5	20	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch: WET/37848 Analysis Method: SM 2320B

QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006

METHOD BLANK: 1085484 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	10/24/12 10:56	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	10/24/12 10:56	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	10/24/12 10:56	

LABORATORY CONTROL SAMPLE: 1085485

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Alkalinity, Total as CaCO ₃	mg/L	500	493	99	90-110	

SAMPLE DUPLICATE: 1085486

Parameter	Units	60131463001	Dup	Max	Qualifiers
		Result	Result	RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24
Alkalinity, Total as CaCO ₃	mg/L	223	227	2	9
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	223	227	2	9

SAMPLE DUPLICATE: 1085487

Parameter	Units	60131643002	Dup	Max	Qualifiers
		Result	Result	RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24
Alkalinity, Total as CaCO ₃	mg/L	499	522	5	9
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	499	522	5	9

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37879	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
Associated Lab Samples:	60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023		

METHOD BLANK: 1086447 Matrix: Water

Associated Lab Samples: 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013,
60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020,
60131713021, 60131713022, 60131713023

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	10/25/12 08:58	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	10/25/12 08:58	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	10/25/12 08:58	

LABORATORY CONTROL SAMPLE: 1086448

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Alkalinity, Total as CaCO ₃	mg/L	500	480	96	90-110	

SAMPLE DUPLICATE: 1086449

Parameter	Units	60131827001	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24	
Alkalinity, Total as CaCO ₃	mg/L	109	110	1	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	109	110	1	9	

SAMPLE DUPLICATE: 1086450

Parameter	Units	60131713014	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24	
Alkalinity, Total as CaCO ₃	mg/L	99.1	101	2	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	99.1	101	2	9	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WET/37880	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
Associated Lab Samples:	60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK: 1086451 Matrix: Water

Associated Lab Samples: 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030

Parameter	Units	Blank	Reporting		Qualifiers
		Result	Limit	Analyzed	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	10/25/12 10:52	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	10/25/12 10:52	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	10/25/12 10:52	

LABORATORY CONTROL SAMPLE: 1086452

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Alkalinity, Total as CaCO ₃	mg/L	500	492	98	90-110	

SAMPLE DUPLICATE: 1086453

Parameter	Units	60131713024	Dup	Max	Qualifiers
		Result	Result	RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24
Alkalinity, Total as CaCO ₃	mg/L	95.4	97.3	2	9
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	95.4	97.3	2	9

SAMPLE DUPLICATE: 1086454

Parameter	Units	60131790003	Dup	Max	Qualifiers
		Result	Result	RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	56.4	59.6	6	24
Alkalinity, Total as CaCO ₃	mg/L	976	968	1	9
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	920	908	1	9

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37870	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713012, 60131713015, 60131713016, 60131713017, 60131713018		

METHOD BLANK: 1086174 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713012, 60131713015, 60131713016, 60131713017, 60131713018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	10/24/12 15:30	

SAMPLE DUPLICATE: 1086175

Parameter	Units	60131713001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	179	182	2	17	

SAMPLE DUPLICATE: 1086176

Parameter	Units	60131585002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	86.0	87.0	1	17	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37898	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60131713011, 60131713013, 60131713014, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029		

METHOD BLANK: 1087201 Matrix: Water

Associated Lab Samples: 60131713011, 60131713013, 60131713014, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	10/25/12 15:51	

SAMPLE DUPLICATE: 1087202

Parameter	Units	60131713011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	ND	ND		17	

SAMPLE DUPLICATE: 1087203

Parameter	Units	60131713026 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	3730	3840	3	17	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WET/37912	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60131713030		

METHOD BLANK:	1087567	Matrix:	Water
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Associated Lab Samples: 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	10/26/12 11:21	

SAMPLE DUPLICATE: 1087568

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	6520	6860	5	17	

SAMPLE DUPLICATE: 1087569

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	2940	2080	35	17	D6

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37856	Analysis Method:	SM 2540D
QC Batch Method:	SM 2540D	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	60131713001, 60131713003, 60131713004, 60131713008, 60131713012, 60131713015, 60131713016, 60131713017, 60131713018		

METHOD BLANK:	1085805	Matrix:	Water
Associated Lab Samples:	60131713001, 60131713003, 60131713004, 60131713008, 60131713012, 60131713015, 60131713016, 60131713017, 60131713018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/24/12 11:20	

SAMPLE DUPLICATE: 1085806

Parameter	Units	60131711001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

SAMPLE DUPLICATE: 1085807

Parameter	Units	60131515001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37859	Analysis Method:	SM 2540D
QC Batch Method:	SM 2540D	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	60131713002, 60131713005, 60131713006, 60131713007, 60131713009, 60131713010, 60131713011, 60131713013		

METHOD BLANK:	1085814	Matrix:	Water
Associated Lab Samples:	60131713002, 60131713005, 60131713006, 60131713007, 60131713009, 60131713010, 60131713011, 60131713013		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/25/12 10:27	

SAMPLE DUPLICATE: 1085815

Parameter	Units	60131639001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	7.0	7.0	0	25	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37889	Analysis Method:	SM 2540D
QC Batch Method:	SM 2540D	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	60131713014, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029		

METHOD BLANK:	1086596	Matrix:	Water
Associated Lab Samples:	60131713014, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/25/12 10:31	

SAMPLE DUPLICATE: 1086597

Parameter	Units	60131899001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	5.0	5.0	0	25	

SAMPLE DUPLICATE: 1086598

Parameter	Units	60131713027 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	48.0	49.0	2	25	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37909	Analysis Method:	SM 2540D
QC Batch Method:	SM 2540D	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	60131713030		

METHOD BLANK: 1087537 Matrix: Water

Associated Lab Samples: 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	10/26/12 09:57	

SAMPLE DUPLICATE: 1087538

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

SAMPLE DUPLICATE: 1087539

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37852	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
Associated Lab Samples:	60131713001, 60131713003, 60131713004, 60131713008, 60131713012, 60131713015, 60131713016, 60131713017, 60131713018		

METHOD BLANK:	1085729	Matrix:	Water
Associated Lab Samples:	60131713001, 60131713003, 60131713004, 60131713008, 60131713012, 60131713015, 60131713016, 60131713017, 60131713018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/24/12 23:53	

LABORATORY CONTROL SAMPLE: 1085730

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.53	106	80-120	

MATRIX SPIKE SAMPLE: 1085738

Parameter	Units	Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	60131713018	ND	.5	0.58	115	75-125

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WET/37896	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
Associated Lab Samples:	60131713002, 60131713005, 60131713006, 60131713007, 60131713009, 60131713010, 60131713011, 60131713013, 60131713014, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029		

METHOD BLANK: 1087155 Matrix: Water

Associated Lab Samples: 60131713002, 60131713005, 60131713006, 60131713007, 60131713009, 60131713010, 60131713011,
60131713013, 60131713014, 60131713019, 60131713020, 60131713021, 60131713022, 60131713023,
60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Sulfide, Total	mg/L	ND	0.050	10/25/12 22:41	

LABORATORY CONTROL SAMPLE: 1087156

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Sulfide, Total	mg/L	1	0.99	99	80-120	

MATRIX SPIKE SAMPLE: 1087157

Parameter	Units	60131713002	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits	
Sulfide, Total	mg/L	ND	1	0.79	79	75-125	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WET/37926	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
Associated Lab Samples:	60131713030		

METHOD BLANK: 1087801 Matrix: Water

Associated Lab Samples: 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/26/12 18:28	

LABORATORY CONTROL SAMPLE: 1087802

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	1	1.1	108	80-120	

MATRIX SPIKE SAMPLE: 1087803

Parameter	Units	60131941002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	1	0.34	33	75-125	M1

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WETA/22231	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK: 1088963 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/28/12 12:56	
Sulfate	mg/L	ND	1.0	10/28/12 12:56	

METHOD BLANK: 1089133 Matrix: Water

Associated Lab Samples: 60131713002, 60131713014, 60131713018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/29/12 12:27	

LABORATORY CONTROL SAMPLE: 1088964

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	4.9	99	90-110	

LABORATORY CONTROL SAMPLE: 1089134

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	

MATRIX SPIKE SAMPLE: 1088965

Parameter	Units	60131713001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1.4	5	5.9	90	64-118	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1088966 1088967

Parameter	Units	60131713002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.4	5	5	5.9	6.0	90	92	64-118	1	12	

Date: 12/05/2012 04:36 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WETA/22232	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK: 1088968 Matrix: Water

Associated Lab Samples: 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713027, 60131713028, 60131713029, 60131713030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/28/12 12:52	
Sulfate	mg/L	ND	1.0	10/28/12 12:52	

METHOD BLANK: 1089088 Matrix: Water

Associated Lab Samples: 60131713021, 60131713026, 60131713027, 60131713028, 60131713029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/29/12 12:24	
Sulfate	mg/L	ND	1.0	10/29/12 12:24	

LABORATORY CONTROL SAMPLE: 1088969

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

LABORATORY CONTROL SAMPLE: 1089089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1088970 1088971

Parameter	Units	60131713021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
Chloride	mg/L	1.2	5	5	5.7	5.8	90	91	64-118	1	12	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WETA/22253	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010		

METHOD BLANK: 1089591 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007,
60131713008, 60131713009, 60131713010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	0.10	11/01/12 13:32	

LABORATORY CONTROL SAMPLE: 1089592

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	2	2.0	101	90-110	

MATRIX SPIKE SAMPLE: 1089593

Parameter	Units	60131713001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	2	2.1	104	90-110	

SAMPLE DUPLICATE: 1089594

Parameter	Units	60131713002 Result	Dup Result	Max RPD	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	ND	13	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WETA/22254	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
Associated Lab Samples:	60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK:	1089595	Matrix:	Water
Associated Lab Samples:	60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	0.10	11/01/12 13:46	

LABORATORY CONTROL SAMPLE: 1089596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 1089597

Parameter	Units	60131713012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	2	2.0	102	90-110	

SAMPLE DUPLICATE: 1089598

Parameter	Units	60131713012 Result	Dup Result	Max RPD	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	ND	13	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WETA/22255	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK:	1089599	Matrix:	Water
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	0.10	11/01/12 14:02	

LABORATORY CONTROL SAMPLE: 1089600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1089601

Parameter	Units	60131713021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	2	2.0	100	90-110	

SAMPLE DUPLICATE: 1089602

Parameter	Units	60131713022 Result	Dup Result	Max RPD	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	ND	13	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WETA/22170	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019		

METHOD BLANK: 1085676 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Cyanide	mg/L	ND	0.0050	10/24/12 14:47	

LABORATORY CONTROL SAMPLE: 1085677

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Cyanide	mg/L	.1	0.11	114	69-126	

MATRIX SPIKE SAMPLE: 1085678

Parameter	Units	60131797001	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits	
Cyanide	mg/L	ND	.1	0.12	122	41-136	

SAMPLE DUPLICATE: 1085679

Parameter	Units	60131713001	Dup	Max	Qualifiers
		Result	Result	RPD	
Cyanide	mg/L	ND	ND	26	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WETA/22171	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
Associated Lab Samples:	60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK:	1085680	Matrix:	Water
Associated Lab Samples:	60131713020, 60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	10/24/12 15:17	

LABORATORY CONTROL SAMPLE: 1085681

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	102	69-126	

MATRIX SPIKE SAMPLE: 1085682

Parameter	Units	60131713020 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.1	0.13	125	41-136	

SAMPLE DUPLICATE: 1085683

Parameter	Units	60131713021 Result	Dup Result	Max RPD	Qualifiers
Cyanide	mg/L	ND	ND	26	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI

Pace Project No.: 60131713

QC Batch:	WETA/22343	Analysis Method:	SM 5310C
QC Batch Method:	SM 5310C	Analysis Description:	5310C Total Organic Carbon
Associated Lab Samples:	60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020		

METHOD BLANK: 1093084 Matrix: Water

Associated Lab Samples: 60131713001, 60131713002, 60131713003, 60131713004, 60131713005, 60131713006, 60131713007, 60131713008, 60131713009, 60131713010, 60131713011, 60131713012, 60131713013, 60131713014, 60131713015, 60131713016, 60131713017, 60131713018, 60131713019, 60131713020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	11/04/12 13:53	

LABORATORY CONTROL SAMPLE: 1093085

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.7	94	80-120	

MATRIX SPIKE SAMPLE: 1093086

Parameter	Units	60131713001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	5.2	91	80-120	

SAMPLE DUPLICATE: 1093087

Parameter	Units	60131713002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

QUALITY CONTROL DATA

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

QC Batch:	WETA/22345	Analysis Method:	SM 5310C
QC Batch Method:	SM 5310C	Analysis Description:	5310C Total Organic Carbon
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

METHOD BLANK:	1093157	Matrix:	Water
Associated Lab Samples:	60131713021, 60131713022, 60131713023, 60131713024, 60131713025, 60131713026, 60131713027, 60131713028, 60131713029, 60131713030		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	11/05/12 09:12	

LABORATORY CONTROL SAMPLE: 1093158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.4	89	80-120	

MATRIX SPIKE SAMPLE: 1093159

Parameter	Units	60131713021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	5.2	94	80-120	

SAMPLE DUPLICATE: 1093160

Parameter	Units	60131713022 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND	25		

QUALIFIERS

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

H1 Analysis conducted outside the recognized method holding time.

H2 Extraction or preparation was conducted outside of the recognized method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

P8 Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713001	DR-1_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713002	DR-2_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713003	DR-3_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713004	DR-4_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713005	DR-5_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713006	DR-6_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713007	DR-7_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713008	DR-8_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713009	DR-4-SW_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713010	DR-G_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713011	FB_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713012	GW-1_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713013	GW-3_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713014	GW-4_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713015	GW-5_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713016	GW-6_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713017	GW-7_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713018	EB-1_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713019	EB-2_20121017	EPA 200.7	MPRP/20181	EPA 200.7	ICP/16521
60131713020	MW-1 SHALLOW_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713021	MW-1 DEEP_20121017	EPA 200.7	MPRP/20296	EPA 200.7	ICP/16580
60131713021	MW-1 DEEP_20121017	EPA 200.7	MPRP/20313	EPA 200.7	ICP/16588
60131713022	MW-2 DEEP_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713023	MW-3 DEEP_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713024	MW-4 SHALLOW_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713025	MW-4 DEEP_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713026	MW-5 SHALLOW_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713027	MW-5 DEEP_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713028	MW-6 SHALLOW_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713029	MW-6 DEEP_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713030	BAH-01_20121017	EPA 200.7	MPRP/20182	EPA 200.7	ICP/16519
60131713001	DR-1_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713002	DR-2_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713003	DR-3_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713004	DR-4_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713005	DR-5_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713006	DR-6_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713007	DR-7_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713008	DR-8_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713009	DR-4-SW_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713010	DR-G_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713011	FB_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713012	GW-1_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713013	GW-3_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713014	GW-4_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713015	GW-5_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713016	GW-6_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713017	GW-7_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713018	EB-1_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713019	EB-2_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713020	MW-1 SHALLOW_20121017	EPA 200.8	MPRP/36003	EPA 200.8	ICPM/14280
60131713021	MW-1 DEEP_20121017	EPA 200.8	MPRP/36287	EPA 200.8	ICPM/14368
60131713022	MW-2 DEEP_20121017	EPA 200.8	MPRP/36287	EPA 200.8	ICPM/14368
60131713023	MW-3 DEEP_20121017	EPA 200.8	MPRP/36287	EPA 200.8	ICPM/14368
60131713024	MW-4 SHALLOW_20121017	EPA 200.8	MPRP/36004	EPA 200.8	ICPM/14294
60131713025	MW-4 DEEP_20121017	EPA 200.8	MPRP/36287	EPA 200.8	ICPM/14368
60131713026	MW-5 SHALLOW_20121017	EPA 200.8	MPRP/36004	EPA 200.8	ICPM/14294
60131713027	MW-5 DEEP_20121017	EPA 200.8	MPRP/36287	EPA 200.8	ICPM/14368
60131713028	MW-6 SHALLOW_20121017	EPA 200.8	MPRP/36287	EPA 200.8	ICPM/14368
60131713029	MW-6 DEEP_20121017	EPA 200.8	MPRP/36004	EPA 200.8	ICPM/14294
60131713030	BAH-01_20121017	EPA 200.8	MPRP/36414	EPA 200.8	ICPM/14457
60131713001	DR-1_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713002	DR-2_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713003	DR-3_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713004	DR-4_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713005	DR-5_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713006	DR-6_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713007	DR-7_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713008	DR-8_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713009	DR-4-SW_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713010	DR-G_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713011	FB_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713012	GW-1_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713013	GW-3_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713014	GW-4_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713015	GW-5_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713016	GW-6_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713017	GW-7_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713018	EB-1_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713019	EB-2_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713020	MW-1 SHALLOW_20121017	EPA 200.8	MPRP/36001	EPA 200.8	ICPM/14281
60131713021	MW-1 DEEP_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713022	MW-2 DEEP_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713023	MW-3 DEEP_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713024	MW-4 SHALLOW_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713025	MW-4 DEEP_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713026	MW-5 SHALLOW_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713027	MW-5 DEEP_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713028	MW-6 SHALLOW_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295
60131713029	MW-6 DEEP_20121017	EPA 200.8	MPRP/36002	EPA 200.8	ICPM/14295

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713030	BAH-01_20121017	EPA 200.8	MPRP/36546	EPA 200.8	ICPM/14599
60131713001	DR-1_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713002	DR-2_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713003	DR-3_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713004	DR-4_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713005	DR-5_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713006	DR-6_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713007	DR-7_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713008	DR-8_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713009	DR-4-SW_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713010	DR-G_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713011	FB_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713012	GW-1_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713013	GW-3_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713014	GW-4_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713015	GW-5_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713016	GW-6_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713017	GW-7_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713018	EB-1_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713019	EB-2_20121017	EPA 200.8	MPRP/20183	EPA 200.8	ICPM/1772
60131713020	MW-1 SHALLOW_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713021	MW-1 DEEP_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713022	MW-2 DEEP_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713023	MW-3 DEEP_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713024	MW-4 SHALLOW_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713025	MW-4 DEEP_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713026	MW-5 SHALLOW_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713027	MW-5 DEEP_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713028	MW-6 SHALLOW_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713029	MW-6 DEEP_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131713030	BAH-01_20121017	EPA 200.8	MPRP/20184	EPA 200.8	ICPM/1773
60131714003	BAH-01_20121017 SOIL	EPA 3050	MPRP/36091	EPA 6020	ICPM/14325
60131713001	DR-1_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713002	DR-2_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713003	DR-3_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713004	DR-4_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713005	DR-5_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713006	DR-6_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713007	DR-7_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713008	DR-8_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713009	DR-4-SW_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713010	DR-G_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713011	FB_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713012	GW-1_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713013	GW-3_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713014	GW-4_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713015	GW-5_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713016	GW-6_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713017	GW-7_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713018	EB-1_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713019	EB-2_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713020	MW-1 SHALLOW_20121017	EPA 245.1	MERP/7700	EPA 245.1	MERC/8626
60131713021	MW-1 DEEP_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713022	MW-2 DEEP_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713023	MW-3 DEEP_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713024	MW-4 SHALLOW_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713025	MW-4 DEEP_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713026	MW-5 SHALLOW_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713027	MW-5 DEEP_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713028	MW-6 SHALLOW_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713029	MW-6 DEEP_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713030	BAH-01_20121017	EPA 245.1	MERP/7727	EPA 245.1	MERC/8647
60131713001	DR-1_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713002	DR-2_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713003	DR-3_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713004	DR-4_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713005	DR-5_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713006	DR-6_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713007	DR-7_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713008	DR-8_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713009	DR-4-SW_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713010	DR-G_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713011	FB_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713012	GW-1_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713013	GW-3_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713014	GW-4_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713015	GW-5_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713016	GW-6_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713017	GW-7_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713018	EB-1_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713019	EB-2_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713020	MW-1 SHALLOW_20121017	EPA 245.1	MERP/7697	EPA 245.1	MERC/8623
60131713021	MW-1 DEEP_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713022	MW-2 DEEP_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713023	MW-3 DEEP_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713024	MW-4 SHALLOW_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713025	MW-4 DEEP_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713026	MW-5 SHALLOW_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713027	MW-5 DEEP_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713028	MW-6 SHALLOW_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713029	MW-6 DEEP_20121017	EPA 245.1	MERP/7698	EPA 245.1	MERC/8608
60131713030	BAH-01_20121017	EPA 245.1	MERP/7822	EPA 245.1	MERC/8767
60131713001	DR-1_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713002	DR-2_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713003	DR-3_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713004	DR-4_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713005	DR-5_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713006	DR-6_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713007	DR-7_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713008	DR-8_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713009	DR-4-SW_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713010	DR-G_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713011	FB_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713012	GW-1_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713013	GW-3_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713014	GW-4_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713015	GW-5_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713016	GW-6_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713017	GW-7_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713018	EB-1_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713019	EB-2_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713020	MW-1 SHALLOW_20121017	EPA 245.1	MERP/6762	EPA 245.1	MERC/6719
60131713021	MW-1 DEEP_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713022	MW-2 DEEP_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713023	MW-3 DEEP_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713024	MW-4 SHALLOW_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713025	MW-4 DEEP_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713026	MW-5 SHALLOW_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713027	MW-5 DEEP_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713028	MW-6 SHALLOW_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713029	MW-6 DEEP_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131713030	BAH-01_20121017	EPA 245.1	MERP/6763	EPA 245.1	MERC/6726
60131714003	BAH-01_20121017 SOIL	EPA 7471	MERP/7713	EPA 7471	MERC/8616
60131714003	BAH-01_20121017 SOIL	ASTM D2974	MPRP/36105		
60131713001	DR-1_20121017	SM 2510B	MT/10548		
60131713002	DR-2_20121017	SM 2510B	MT/10548		
60131713003	DR-3_20121017	SM 2510B	MT/10548		
60131713004	DR-4_20121017	SM 2510B	MT/10548		
60131713005	DR-5_20121017	SM 2510B	MT/10548		
60131713006	DR-6_20121017	SM 2510B	MT/10548		
60131713007	DR-7_20121017	SM 2510B	MT/10548		
60131713008	DR-8_20121017	SM 2510B	MT/10548		
60131713009	DR-4-SW_20121017	SM 2510B	MT/10548		
60131713010	DR-G_20121017	SM 2510B	MT/10548		
60131713011	FB_20121017	SM 2510B	MT/10548		
60131713012	GW-1_20121017	SM 2510B	MT/10548		
60131713013	GW-3_20121017	SM 2510B	MT/10548		
60131713014	GW-4_20121017	SM 2510B	MT/10548		
60131713015	GW-5_20121017	SM 2510B	MT/10548		
60131713016	GW-6_20121017	SM 2510B	MT/10548		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713017	GW-7_20121017	SM 2510B	MT/10548		
60131713018	EB-1_20121017	SM 2510B	MT/10548		
60131713019	EB-2_20121017	SM 2510B	MT/10548		
60131713020	MW-1 SHALLOW_20121017	SM 2510B	MT/10548		
60131713021	MW-1 DEEP_20121017	SM 2510B	MT/10549		
60131713022	MW-2 DEEP_20121017	SM 2510B	MT/10549		
60131713023	MW-3 DEEP_20121017	SM 2510B	MT/10549		
60131713024	MW-4 SHALLOW_20121017	SM 2510B	MT/10549		
60131713025	MW-4 DEEP_20121017	SM 2510B	MT/10549		
60131713026	MW-5 SHALLOW_20121017	SM 2510B	MT/10549		
60131713027	MW-5 DEEP_20121017	SM 2510B	MT/10549		
60131713028	MW-6 SHALLOW_20121017	SM 2510B	MT/10549		
60131713029	MW-6 DEEP_20121017	SM 2510B	MT/10549		
60131713030	BAH-01_20121017	SM 2510B	MT/10549		
60131713001	DR-1_20121017	Calculated	MT/10557		
60131713002	DR-2_20121017	Calculated	MT/10557		
60131713003	DR-3_20121017	Calculated	MT/10557		
60131713004	DR-4_20121017	Calculated	MT/10557		
60131713005	DR-5_20121017	Calculated	MT/10557		
60131713006	DR-6_20121017	Calculated	MT/10557		
60131713007	DR-7_20121017	Calculated	MT/10557		
60131713008	DR-8_20121017	Calculated	MT/10557		
60131713009	DR-4-SW_20121017	Calculated	MT/10557		
60131713010	DR-G_20121017	Calculated	MT/10557		
60131713011	FB_20121017	Calculated	MT/10557		
60131713012	GW-1_20121017	Calculated	MT/10557		
60131713013	GW-3_20121017	Calculated	MT/10557		
60131713014	GW-4_20121017	Calculated	MT/10557		
60131713015	GW-5_20121017	Calculated	MT/10557		
60131713016	GW-6_20121017	Calculated	MT/10557		
60131713017	GW-7_20121017	Calculated	MT/10557		
60131713018	EB-1_20121017	Calculated	MT/10557		
60131713019	EB-2_20121017	Calculated	MT/10557		
60131713020	MW-1 SHALLOW_20121017	Calculated	MT/10557		
60131713021	MW-1 DEEP_20121017	Calculated	MT/10558		
60131713022	MW-2 DEEP_20121017	Calculated	MT/10558		
60131713023	MW-3 DEEP_20121017	Calculated	MT/10558		
60131713024	MW-4 SHALLOW_20121017	Calculated	MT/10558		
60131713025	MW-4 DEEP_20121017	Calculated	MT/10558		
60131713026	MW-5 SHALLOW_20121017	Calculated	MT/10558		
60131713027	MW-5 DEEP_20121017	Calculated	MT/10558		
60131713028	MW-6 SHALLOW_20121017	Calculated	MT/10558		
60131713029	MW-6 DEEP_20121017	Calculated	MT/10558		
60131713030	BAH-01_20121017	Calculated	MT/10558		
60131713001	DR-1_20121017	SM 2320B	WET/37848		
60131713002	DR-2_20121017	SM 2320B	WET/37848		
60131713003	DR-3_20121017	SM 2320B	WET/37848		

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Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713004	DR-4_20121017	SM 2320B	WET/37848		
60131713005	DR-5_20121017	SM 2320B	WET/37848		
60131713006	DR-6_20121017	SM 2320B	WET/37848		
60131713007	DR-7_20121017	SM 2320B	WET/37879		
60131713008	DR-8_20121017	SM 2320B	WET/37879		
60131713009	DR-4-SW_20121017	SM 2320B	WET/37879		
60131713010	DR-G_20121017	SM 2320B	WET/37879		
60131713011	FB_20121017	SM 2320B	WET/37879		
60131713012	GW-1_20121017	SM 2320B	WET/37879		
60131713013	GW-3_20121017	SM 2320B	WET/37879		
60131713014	GW-4_20121017	SM 2320B	WET/37879		
60131713015	GW-5_20121017	SM 2320B	WET/37879		
60131713016	GW-6_20121017	SM 2320B	WET/37879		
60131713017	GW-7_20121017	SM 2320B	WET/37879		
60131713018	EB-1_20121017	SM 2320B	WET/37879		
60131713019	EB-2_20121017	SM 2320B	WET/37879		
60131713020	MW-1 SHALLOW_20121017	SM 2320B	WET/37879		
60131713021	MW-1 DEEP_20121017	SM 2320B	WET/37879		
60131713022	MW-2 DEEP_20121017	SM 2320B	WET/37879		
60131713023	MW-3 DEEP_20121017	SM 2320B	WET/37879		
60131713024	MW-4 SHALLOW_20121017	SM 2320B	WET/37880		
60131713025	MW-4 DEEP_20121017	SM 2320B	WET/37880		
60131713026	MW-5 SHALLOW_20121017	SM 2320B	WET/37880		
60131713027	MW-5 DEEP_20121017	SM 2320B	WET/37880		
60131713028	MW-6 SHALLOW_20121017	SM 2320B	WET/37880		
60131713029	MW-6 DEEP_20121017	SM 2320B	WET/37880		
60131713030	BAH-01_20121017	SM 2320B	WET/37880		
60131713001	DR-1_20121017	SM 2540C	WET/37870		
60131713002	DR-2_20121017	SM 2540C	WET/37870		
60131713003	DR-3_20121017	SM 2540C	WET/37870		
60131713004	DR-4_20121017	SM 2540C	WET/37870		
60131713005	DR-5_20121017	SM 2540C	WET/37870		
60131713006	DR-6_20121017	SM 2540C	WET/37870		
60131713007	DR-7_20121017	SM 2540C	WET/37870		
60131713008	DR-8_20121017	SM 2540C	WET/37870		
60131713009	DR-4-SW_20121017	SM 2540C	WET/37870		
60131713010	DR-G_20121017	SM 2540C	WET/37870		
60131713011	FB_20121017	SM 2540C	WET/37898		
60131713012	GW-1_20121017	SM 2540C	WET/37870		
60131713013	GW-3_20121017	SM 2540C	WET/37898		
60131713014	GW-4_20121017	SM 2540C	WET/37898		
60131713015	GW-5_20121017	SM 2540C	WET/37870		
60131713016	GW-6_20121017	SM 2540C	WET/37870		
60131713017	GW-7_20121017	SM 2540C	WET/37870		
60131713018	EB-1_20121017	SM 2540C	WET/37870		

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Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713019	EB-2_20121017	SM 2540C	WET/37898		
60131713020	MW-1 SHALLOW_20121017	SM 2540C	WET/37898		
60131713021	MW-1 DEEP_20121017	SM 2540C	WET/37898		
60131713022	MW-2 DEEP_20121017	SM 2540C	WET/37898		
60131713023	MW-3 DEEP_20121017	SM 2540C	WET/37898		
60131713024	MW-4 SHALLOW_20121017	SM 2540C	WET/37898		
60131713025	MW-4 DEEP_20121017	SM 2540C	WET/37898		
60131713026	MW-5 SHALLOW_20121017	SM 2540C	WET/37898		
60131713027	MW-5 DEEP_20121017	SM 2540C	WET/37898		
60131713028	MW-6 SHALLOW_20121017	SM 2540C	WET/37898		
60131713029	MW-6 DEEP_20121017	SM 2540C	WET/37898		
60131713030	BAH-01_20121017	SM 2540C	WET/37912		
60131713001	DR-1_20121017	SM 2540D	WET/37856		
60131713002	DR-2_20121017	SM 2540D	WET/37859		
60131713003	DR-3_20121017	SM 2540D	WET/37856		
60131713004	DR-4_20121017	SM 2540D	WET/37856		
60131713005	DR-5_20121017	SM 2540D	WET/37859		
60131713006	DR-6_20121017	SM 2540D	WET/37859		
60131713007	DR-7_20121017	SM 2540D	WET/37859		
60131713008	DR-8_20121017	SM 2540D	WET/37856		
60131713009	DR-4-SW_20121017	SM 2540D	WET/37859		
60131713010	DR-G_20121017	SM 2540D	WET/37859		
60131713011	FB_20121017	SM 2540D	WET/37859		
60131713012	GW-1_20121017	SM 2540D	WET/37856		
60131713013	GW-3_20121017	SM 2540D	WET/37859		
60131713014	GW-4_20121017	SM 2540D	WET/37889		
60131713015	GW-5_20121017	SM 2540D	WET/37856		
60131713016	GW-6_20121017	SM 2540D	WET/37856		
60131713017	GW-7_20121017	SM 2540D	WET/37856		
60131713018	EB-1_20121017	SM 2540D	WET/37856		
60131713019	EB-2_20121017	SM 2540D	WET/37889		
60131713020	MW-1 SHALLOW_20121017	SM 2540D	WET/37889		
60131713021	MW-1 DEEP_20121017	SM 2540D	WET/37889		
60131713022	MW-2 DEEP_20121017	SM 2540D	WET/37889		
60131713023	MW-3 DEEP_20121017	SM 2540D	WET/37889		
60131713024	MW-4 SHALLOW_20121017	SM 2540D	WET/37889		
60131713025	MW-4 DEEP_20121017	SM 2540D	WET/37889		
60131713026	MW-5 SHALLOW_20121017	SM 2540D	WET/37889		
60131713027	MW-5 DEEP_20121017	SM 2540D	WET/37889		
60131713028	MW-6 SHALLOW_20121017	SM 2540D	WET/37889		
60131713029	MW-6 DEEP_20121017	SM 2540D	WET/37889		
60131713030	BAH-01_20121017	SM 2540D	WET/37909		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713001	DR-1_20121017	SM 4500-S-2 D	WET/37852		
60131713002	DR-2_20121017	SM 4500-S-2 D	WET/37896		
60131713003	DR-3_20121017	SM 4500-S-2 D	WET/37852		
60131713004	DR-4_20121017	SM 4500-S-2 D	WET/37852		
60131713005	DR-5_20121017	SM 4500-S-2 D	WET/37896		
60131713006	DR-6_20121017	SM 4500-S-2 D	WET/37896		
60131713007	DR-7_20121017	SM 4500-S-2 D	WET/37896		
60131713008	DR-8_20121017	SM 4500-S-2 D	WET/37852		
60131713009	DR-4-SW_20121017	SM 4500-S-2 D	WET/37896		
60131713010	DR-G_20121017	SM 4500-S-2 D	WET/37896		
60131713011	FB_20121017	SM 4500-S-2 D	WET/37896		
60131713012	GW-1_20121017	SM 4500-S-2 D	WET/37852		
60131713013	GW-3_20121017	SM 4500-S-2 D	WET/37896		
60131713014	GW-4_20121017	SM 4500-S-2 D	WET/37896		
60131713015	GW-5_20121017	SM 4500-S-2 D	WET/37852		
60131713016	GW-6_20121017	SM 4500-S-2 D	WET/37852		
60131713017	GW-7_20121017	SM 4500-S-2 D	WET/37852		
60131713018	EB-1_20121017	SM 4500-S-2 D	WET/37852		
60131713019	EB-2_20121017	SM 4500-S-2 D	WET/37896		
60131713020	MW-1 SHALLOW_20121017	SM 4500-S-2 D	WET/37896		
60131713021	MW-1 DEEP_20121017	SM 4500-S-2 D	WET/37896		
60131713022	MW-2 DEEP_20121017	SM 4500-S-2 D	WET/37896		
60131713023	MW-3 DEEP_20121017	SM 4500-S-2 D	WET/37896		
60131713024	MW-4 SHALLOW_20121017	SM 4500-S-2 D	WET/37896		
60131713025	MW-4 DEEP_20121017	SM 4500-S-2 D	WET/37896		
60131713026	MW-5 SHALLOW_20121017	SM 4500-S-2 D	WET/37896		
60131713027	MW-5 DEEP_20121017	SM 4500-S-2 D	WET/37896		
60131713028	MW-6 SHALLOW_20121017	SM 4500-S-2 D	WET/37896		
60131713029	MW-6 DEEP_20121017	SM 4500-S-2 D	WET/37896		
60131713030	BAH-01_20121017	SM 4500-S-2 D	WET/37926		
60131713001	DR-1_20121017	EPA 300.0	WETA/22231		
60131713002	DR-2_20121017	EPA 300.0	WETA/22231		
60131713003	DR-3_20121017	EPA 300.0	WETA/22231		
60131713004	DR-4_20121017	EPA 300.0	WETA/22231		
60131713005	DR-5_20121017	EPA 300.0	WETA/22231		
60131713006	DR-6_20121017	EPA 300.0	WETA/22231		
60131713007	DR-7_20121017	EPA 300.0	WETA/22231		
60131713008	DR-8_20121017	EPA 300.0	WETA/22231		
60131713009	DR-4-SW_20121017	EPA 300.0	WETA/22231		
60131713010	DR-G_20121017	EPA 300.0	WETA/22231		
60131713011	FB_20121017	EPA 300.0	WETA/22231		
60131713012	GW-1_20121017	EPA 300.0	WETA/22231		
60131713013	GW-3_20121017	EPA 300.0	WETA/22231		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713014	GW-4_20121017	EPA 300.0	WETA/22231		
60131713015	GW-5_20121017	EPA 300.0	WETA/22231		
60131713016	GW-6_20121017	EPA 300.0	WETA/22231		
60131713017	GW-7_20121017	EPA 300.0	WETA/22231		
60131713018	EB-1_20121017	EPA 300.0	WETA/22231		
60131713019	EB-2_20121017	EPA 300.0	WETA/22231		
60131713020	MW-1 SHALLOW_20121017	EPA 300.0	WETA/22231		
60131713021	MW-1 DEEP_20121017	EPA 300.0	WETA/22232		
60131713022	MW-2 DEEP_20121017	EPA 300.0	WETA/22232		
60131713023	MW-3 DEEP_20121017	EPA 300.0	WETA/22232		
60131713024	MW-4 SHALLOW_20121017	EPA 300.0	WETA/22232		
60131713025	MW-4 DEEP_20121017	EPA 300.0	WETA/22232		
60131713026	MW-5 SHALLOW_20121017	EPA 300.0	WETA/22232		
60131713027	MW-5 DEEP_20121017	EPA 300.0	WETA/22232		
60131713028	MW-6 SHALLOW_20121017	EPA 300.0	WETA/22232		
60131713029	MW-6 DEEP_20121017	EPA 300.0	WETA/22232		
60131713030	BAH-01_20121017	EPA 300.0	WETA/22232		
60131713001	DR-1_20121017	EPA 353.2	WETA/22253		
60131713002	DR-2_20121017	EPA 353.2	WETA/22253		
60131713003	DR-3_20121017	EPA 353.2	WETA/22253		
60131713004	DR-4_20121017	EPA 353.2	WETA/22253		
60131713005	DR-5_20121017	EPA 353.2	WETA/22253		
60131713006	DR-6_20121017	EPA 353.2	WETA/22253		
60131713007	DR-7_20121017	EPA 353.2	WETA/22253		
60131713008	DR-8_20121017	EPA 353.2	WETA/22253		
60131713009	DR-4-SW_20121017	EPA 353.2	WETA/22253		
60131713010	DR-G_20121017	EPA 353.2	WETA/22253		
60131713011	FB_20121017	EPA 353.2	WETA/22254		
60131713012	GW-1_20121017	EPA 353.2	WETA/22254		
60131713013	GW-3_20121017	EPA 353.2	WETA/22254		
60131713014	GW-4_20121017	EPA 353.2	WETA/22254		
60131713015	GW-5_20121017	EPA 353.2	WETA/22254		
60131713016	GW-6_20121017	EPA 353.2	WETA/22254		
60131713017	GW-7_20121017	EPA 353.2	WETA/22254		
60131713018	EB-1_20121017	EPA 353.2	WETA/22254		
60131713019	EB-2_20121017	EPA 353.2	WETA/22254		
60131713020	MW-1 SHALLOW_20121017	EPA 353.2	WETA/22254		
60131713021	MW-1 DEEP_20121017	EPA 353.2	WETA/22255		
60131713022	MW-2 DEEP_20121017	EPA 353.2	WETA/22255		
60131713023	MW-3 DEEP_20121017	EPA 353.2	WETA/22255		
60131713024	MW-4 SHALLOW_20121017	EPA 353.2	WETA/22255		
60131713025	MW-4 DEEP_20121017	EPA 353.2	WETA/22255		
60131713026	MW-5 SHALLOW_20121017	EPA 353.2	WETA/22255		
60131713027	MW-5 DEEP_20121017	EPA 353.2	WETA/22255		
60131713028	MW-6 SHALLOW_20121017	EPA 353.2	WETA/22255		
60131713029	MW-6 DEEP_20121017	EPA 353.2	WETA/22255		
60131713030	BAH-01_20121017	EPA 353.2	WETA/22255		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713001	DR-1_20121017	SM 4500-CN-E	WETA/22170		
60131713002	DR-2_20121017	SM 4500-CN-E	WETA/22170		
60131713003	DR-3_20121017	SM 4500-CN-E	WETA/22170		
60131713004	DR-4_20121017	SM 4500-CN-E	WETA/22170		
60131713005	DR-5_20121017	SM 4500-CN-E	WETA/22170		
60131713006	DR-6_20121017	SM 4500-CN-E	WETA/22170		
60131713007	DR-7_20121017	SM 4500-CN-E	WETA/22170		
60131713008	DR-8_20121017	SM 4500-CN-E	WETA/22170		
60131713009	DR-4-SW_20121017	SM 4500-CN-E	WETA/22170		
60131713010	DR-G_20121017	SM 4500-CN-E	WETA/22170		
60131713011	FB_20121017	SM 4500-CN-E	WETA/22170		
60131713012	GW-1_20121017	SM 4500-CN-E	WETA/22170		
60131713013	GW-3_20121017	SM 4500-CN-E	WETA/22170		
60131713014	GW-4_20121017	SM 4500-CN-E	WETA/22170		
60131713015	GW-5_20121017	SM 4500-CN-E	WETA/22170		
60131713016	GW-6_20121017	SM 4500-CN-E	WETA/22170		
60131713017	GW-7_20121017	SM 4500-CN-E	WETA/22170		
60131713018	EB-1_20121017	SM 4500-CN-E	WETA/22170		
60131713019	EB-2_20121017	SM 4500-CN-E	WETA/22170		
60131713020	MW-1 SHALLOW_20121017	SM 4500-CN-E	WETA/22171		
60131713021	MW-1 DEEP_20121017	SM 4500-CN-E	WETA/22171		
60131713022	MW-2 DEEP_20121017	SM 4500-CN-E	WETA/22171		
60131713023	MW-3 DEEP_20121017	SM 4500-CN-E	WETA/22171		
60131713024	MW-4 SHALLOW_20121017	SM 4500-CN-E	WETA/22171		
60131713025	MW-4 DEEP_20121017	SM 4500-CN-E	WETA/22171		
60131713026	MW-5 SHALLOW_20121017	SM 4500-CN-E	WETA/22171		
60131713027	MW-5 DEEP_20121017	SM 4500-CN-E	WETA/22171		
60131713028	MW-6 SHALLOW_20121017	SM 4500-CN-E	WETA/22171		
60131713029	MW-6 DEEP_20121017	SM 4500-CN-E	WETA/22171		
60131713030	BAH-01_20121017	SM 4500-CN-E	WETA/22171		
60131713001	DR-1_20121017	SM 5310C	WETA/22343		
60131713002	DR-2_20121017	SM 5310C	WETA/22343		
60131713003	DR-3_20121017	SM 5310C	WETA/22343		
60131713004	DR-4_20121017	SM 5310C	WETA/22343		
60131713005	DR-5_20121017	SM 5310C	WETA/22343		
60131713006	DR-6_20121017	SM 5310C	WETA/22343		
60131713007	DR-7_20121017	SM 5310C	WETA/22343		
60131713008	DR-8_20121017	SM 5310C	WETA/22343		
60131713009	DR-4-SW_20121017	SM 5310C	WETA/22343		
60131713010	DR-G_20121017	SM 5310C	WETA/22343		
60131713011	FB_20121017	SM 5310C	WETA/22343		
60131713012	GW-1_20121017	SM 5310C	WETA/22343		
60131713013	GW-3_20121017	SM 5310C	WETA/22343		
60131713014	GW-4_20121017	SM 5310C	WETA/22343		
60131713015	GW-5_20121017	SM 5310C	WETA/22343		
60131713016	GW-6_20121017	SM 5310C	WETA/22343		
60131713017	GW-7_20121017	SM 5310C	WETA/22343		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: OCTOBER 2012 RICO WATER SAMPLI
Pace Project No.: 60131713

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60131713018	EB-1_20121017	SM 5310C	WETA/22343		
60131713019	EB-2_20121017	SM 5310C	WETA/22343		
60131713020	MW-1 SHALLOW_20121017	SM 5310C	WETA/22343		
60131713021	MW-1 DEEP_20121017	SM 5310C	WETA/22345		
60131713022	MW-2 DEEP_20121017	SM 5310C	WETA/22345		
60131713023	MW-3 DEEP_20121017	SM 5310C	WETA/22345		
60131713024	MW-4 SHALLOW_20121017	SM 5310C	WETA/22345		
60131713025	MW-4 DEEP_20121017	SM 5310C	WETA/22345		
60131713026	MW-5 SHALLOW_20121017	SM 5310C	WETA/22345		
60131713027	MW-5 DEEP_20121017	SM 5310C	WETA/22345		
60131713028	MW-6 SHALLOW_20121017	SM 5310C	WETA/22345		
60131713029	MW-6 DEEP_20121017	SM 5310C	WETA/22345		
60131713030	BAH-01_20121017	SM 5310C	WETA/22345		

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MERP/7755	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1328902 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	11/09/12 11:40	

LABORATORY CONTROL SAMPLE: 1328903

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.9	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1328904 1328905

Parameter	Units	60132534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury	ug/L	ND	5	5	5.1	4.9	102	98	85-115	4	30	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MERP/7756	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury - Dissolved
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1328910 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	11/09/12 11:14	

LABORATORY CONTROL SAMPLE: 1328911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.9	97	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1328912 1328913

Parameter	Units	60132534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	3.3	3.8	66	76	85-115	15	20	M1

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MERP/6851	Analysis Method:	EPA 245.1
QC Batch Method:	EPA 245.1	Analysis Description:	245.1 Mercury, Potentially Dissolved
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1102121 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	0.20	11/21/12 09:50	

LABORATORY CONTROL SAMPLE: 1102122

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	4.4	88	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1102123 1102124

Parameter	Units	60132534001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	4.5	4.6	89	92	70-130	3	20	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MPRP/20563	Analysis Method:	EPA 200.7
QC Batch Method:	EPA 200.7	Analysis Description:	200.7 Potentially Dissolved Metals
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1102263 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium, Dissolved	ug/L	36.6J	100	11/21/12 14:14	
Magnesium, Dissolved	ug/L	ND	50.0	11/21/12 14:14	
Potassium, Dissolved	ug/L	ND	500	11/21/12 14:14	
Sodium, Dissolved	ug/L	68.1J	500	11/21/12 14:14	

LABORATORY CONTROL SAMPLE: 1102264

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium, Dissolved	ug/L	10000	9060	91	85-115	
Magnesium, Dissolved	ug/L	10000	9640	96	85-115	
Potassium, Dissolved	ug/L	10000	9760	98	85-115	
Sodium, Dissolved	ug/L	10000	9510	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1102265 1102266

Parameter	Units	60132534001 Result	MS Spike	MSD Spike	MS	MSD	MS % Rec	MSD % Rec	% Rec	Max	
			Conc.	Conc.	Result	Result	Result	Result	Limits	RPD	Qual
Calcium, Dissolved	ug/L	48400	10000	10000	57600	58400	92	100	70-130	1	20
Magnesium, Dissolved	ug/L	6900	10000	10000	16200	16400	93	95	70-130	1	20
Potassium, Dissolved	ug/L	4390	10000	10000	14200	14200	99	98	70-130	0	20
Sodium, Dissolved	ug/L	3080	10000	10000	12200	12200	92	91	70-130	0	20

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MPRP/36303	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 MET
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1328842 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	ND	4.0	11/15/12 19:49	
Antimony	ug/L	ND	0.50	11/15/12 19:49	
Arsenic	ug/L	ND	0.50	11/15/12 19:49	
Barium	ug/L	ND	0.30	11/15/12 19:49	
Beryllium	ug/L	ND	0.20	11/15/12 19:49	
Cadmium	ug/L	ND	0.080	11/15/12 19:49	
Calcium	ug/L	ND	20.0	11/15/12 19:49	
Chromium	ug/L	ND	0.50	11/15/12 19:49	
Cobalt	ug/L	ND	0.50	11/15/12 19:49	
Copper	ug/L	ND	0.50	11/15/12 19:49	
Iron	ug/L	ND	50.0	11/15/12 19:49	
Lead	ug/L	ND	0.10	11/15/12 19:49	
Magnesium	ug/L	ND	5.0	11/15/12 19:49	
Manganese	ug/L	ND	0.50	11/15/12 19:49	
Molybdenum	ug/L	ND	0.50	11/15/12 19:49	
Nickel	ug/L	ND	0.50	11/15/12 19:49	
Potassium	ug/L	ND	20.0	11/15/12 19:49	
Selenium	ug/L	ND	0.50	11/15/12 19:49	
Silica	ug/L	ND	53.5	11/15/12 19:49	
Silver	ug/L	ND	0.50	11/15/12 19:49	
Sodium	ug/L	ND	50.0	11/15/12 19:49	
Thallium	ug/L	ND	0.10	11/15/12 19:49	
Total Hardness by 2340B	ug/L	ND	71.0	11/15/12 19:49	
Vanadium	ug/L	ND	0.10	11/15/12 19:49	
Zinc	ug/L	ND	5.0	11/15/12 19:49	

LABORATORY CONTROL SAMPLE: 1328843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	75.8	95	85-115	
Antimony	ug/L	80	79.5	99	85-115	
Arsenic	ug/L	80	79.0	99	85-115	
Barium	ug/L	80	77.6	97	85-115	
Beryllium	ug/L	80	86.7	108	85-115	
Cadmium	ug/L	80	80.3	100	85-115	
Calcium	ug/L	1000	942	94	85-115	
Chromium	ug/L	80	81.2	102	85-115	
Cobalt	ug/L	80	79.0	99	85-115	
Copper	ug/L	80	84.2	105	85-115	
Iron	ug/L	1000	986	99	85-115	
Lead	ug/L	80	78.9	99	85-115	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

LABORATORY CONTROL SAMPLE: 1328843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Magnesium	ug/L	1000	978	98	85-115	
Manganese	ug/L	80	78.3	98	85-115	
Molybdenum	ug/L	80	80.4	100	85-115	
Nickel	ug/L	80	80.7	101	85-115	
Potassium	ug/L	1000	933	93	85-115	
Selenium	ug/L	80	75.9	95	85-115	
Silica	ug/L	2140	2110	99	85-115	
Silver	ug/L	80	81.8	102	85-115	
Sodium	ug/L	1000	989	99	85-115	
Thallium	ug/L	80	76.4	95	85-115	
Total Hardness by 2340B	ug/L	6620	6380	96	85-115	
Vanadium	ug/L	80	79.7	100	85-115	
Zinc	ug/L	80	78.9	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1328844 1328845

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	Max		
		60132534001	Spike Conc.	Spike Conc.	Result				RPD	RPD	Qual
Aluminum	ug/L	47.3	80	80	175	165	160	147	70-130	6	20 M1
Antimony	ug/L	ND	80	80	80.6	78.8	101	98	70-130	2	20
Arsenic	ug/L	ND	80	80	77.7	79.4	97	99	70-130	2	20
Barium	ug/L	74.9	80	80	154	149	99	92	70-130	3	20
Beryllium	ug/L	ND	80	80	88.0	87.0	110	109	70-130	1	20
Cadmium	ug/L	ND	80	80	83.5	79.8	104	100	70-130	4	20
Calcium	ug/L	56200	1000	1000	62200	57200	600	105	70-130	8	20 M1
Chromium	ug/L	0.50	80	80	80.0	81.4	99	101	70-130	2	20
Cobalt	ug/L	ND	80	80	81.2	80.0	101	100	70-130	1	20
Copper	ug/L	0.76	80	80	84.4	84.3	105	104	70-130	.2	20
Iron	ug/L	128	1000	1000	1150	1130	102	101	70-130	1	20
Lead	ug/L	0.27	80	80	81.5	79.8	102	99	70-130	2	20
Magnesium	ug/L	7970	1000	1000	8820	8640	85	66	70-130	2	20 M1
Manganese	ug/L	27.2	80	80	107	106	99	98	70-130	.8	20
Molybdenum	ug/L	1.1	80	80	82.0	82.2	101	101	70-130	.2	20
Nickel	ug/L	ND	80	80	84.6	80.8	105	101	70-130	4	20
Potassium	ug/L	4190	1000	1000	5070	4850	88	66	70-130	4	20 M1
Selenium	ug/L	ND	80	80	79.1	76.8	98	96	70-130	3	20
Silica	ug/L	6820	2140	2140	9210	9000	112	102	70-130	2	20
Silver	ug/L	ND	80	80	81.8	79.7	102	100	70-130	3	20
Sodium	ug/L	2760	1000	1000	3660	3710	90	95	70-130	1	20
Thallium	ug/L	ND	80	80	79.5	76.9	99	96	70-130	3	20
Total Hardness by 2340B	ug/L	173000	6620	6620	192000	178000	280	81	70-130	7	20
Vanadium	ug/L	0.18	80	80	80.2	80.6	100	101	70-130	.6	20
Zinc	ug/L	ND	80	80	89.7	86.0	107	102	70-130	4	20

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MPRP/36300	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 MET Dissolved
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1328830 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	4.0	11/16/12 10:13	
Antimony, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Arsenic, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Barium, Dissolved	ug/L	ND	0.30	11/16/12 10:13	
Beryllium, Dissolved	ug/L	ND	0.20	11/16/12 10:13	
Cadmium, Dissolved	ug/L	ND	0.080	11/16/12 10:13	
Calcium, Dissolved	ug/L	ND	20.0	11/16/12 10:13	
Chromium, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Cobalt, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Copper, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Iron, Dissolved	ug/L	ND	50.0	11/16/12 10:13	
Lead, Dissolved	ug/L	ND	0.10	11/16/12 10:13	
Magnesium, Dissolved	ug/L	ND	5.0	11/16/12 10:13	
Manganese, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Molybdenum, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Nickel, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Potassium, Dissolved	ug/L	ND	20.0	11/16/12 10:13	
Selenium, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Silver, Dissolved	ug/L	ND	0.50	11/16/12 10:13	
Sodium, Dissolved	ug/L	ND	50.0	11/16/12 10:13	
Thallium, Dissolved	ug/L	ND	0.10	11/16/12 10:13	
Vanadium, Dissolved	ug/L	ND	0.10	11/16/12 10:13	
Zinc, Dissolved	ug/L	ND	5.0	11/16/12 10:13	

LABORATORY CONTROL SAMPLE: 1328831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	80	76.4	96	85-115	
Antimony, Dissolved	ug/L	80	80.1	100	85-115	
Arsenic, Dissolved	ug/L	80	80.0	100	85-115	
Barium, Dissolved	ug/L	80	80.1	100	85-115	
Beryllium, Dissolved	ug/L	80	88.5	111	85-115	
Cadmium, Dissolved	ug/L	80	82.3	103	85-115	
Calcium, Dissolved	ug/L	1000	988	99	85-115	
Chromium, Dissolved	ug/L	80	83.3	104	85-115	
Cobalt, Dissolved	ug/L	80	82.4	103	85-115	
Copper, Dissolved	ug/L	80	87.1	109	85-115	
Iron, Dissolved	ug/L	1000	1020	102	85-115	
Lead, Dissolved	ug/L	80	81.3	102	85-115	
Magnesium, Dissolved	ug/L	1000	1000	100	85-115	
Manganese, Dissolved	ug/L	80	81.1	101	85-115	

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QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

LABORATORY CONTROL SAMPLE: 1328831

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Molybdenum, Dissolved	ug/L	80	82.0	103	85-115	
Nickel, Dissolved	ug/L	80	84.2	105	85-115	
Potassium, Dissolved	ug/L	1000	961	96	85-115	
Selenium, Dissolved	ug/L	80	78.9	99	85-115	
Silver, Dissolved	ug/L	80	83.5	104	85-115	
Sodium, Dissolved	ug/L	1000	1020	102	85-115	
Thallium, Dissolved	ug/L	80	78.8	99	85-115	
Vanadium, Dissolved	ug/L	80	81.7	102	85-115	
Zinc, Dissolved	ug/L	80	82.3	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1328832 1328833

Parameter	Units	MS Spike		MSD Spike		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
		60132534001	Conc.	Conc.	Result								
Aluminum, Dissolved	ug/L	ND	80	80	85.8	85.5	103	103	70-130	.3	20		
Antimony, Dissolved	ug/L	ND	80	80	78.8	80.4	98	100	70-130	2	20		
Arsenic, Dissolved	ug/L	ND	80	80	78.8	79.6	98	99	70-130	1	20		
Barium, Dissolved	ug/L	71.6	80	80	149	149	97	97	70-130	.07	20		
Beryllium, Dissolved	ug/L	ND	80	80	86.4	86.6	108	108	70-130	.3	20		
Cadmium, Dissolved	ug/L	ND	80	80	80.6	80.7	101	101	70-130	.2	20		
Calcium, Dissolved	ug/L	56800	1000	1000	56700	56600	-15	-20	70-130	.09	20	M1	
Chromium, Dissolved	ug/L	ND	80	80	81.4	81.6	101	102	70-130	.4	20		
Cobalt, Dissolved	ug/L	ND	80	80	80.2	79.4	100	99	70-130	1	20		
Copper, Dissolved	ug/L	1.1	80	80	86.1	84.0	106	104	70-130	2	20		
Iron, Dissolved	ug/L	ND	1000	1000	1030	1000	101	99	70-130	3	20		
Lead, Dissolved	ug/L	ND	80	80	78.4	79.6	98	99	70-130	2	20		
Magnesium, Dissolved	ug/L	7590	1000	1000	8450	8520	86	93	70-130	.8	20		
Manganese, Dissolved	ug/L	16.6	80	80	93.9	94.2	97	97	70-130	.4	20		
Molybdenum, Dissolved	ug/L	1.1	80	80	83.2	82.2	103	101	70-130	1	20		
Nickel, Dissolved	ug/L	ND	80	80	82.4	80.5	103	100	70-130	2	20		
Potassium, Dissolved	ug/L	4520	1000	1000	5330	5330	81	81	70-130	0	20		
Selenium, Dissolved	ug/L	ND	80	80	76.8	76.6	95	95	70-130	.2	20		
Silver, Dissolved	ug/L	ND	80	80	80.7	80.6	101	101	70-130	.06	20		
Sodium, Dissolved	ug/L	2790	1000	1000	3710	3720	92	93	70-130	.3	20		
Thallium, Dissolved	ug/L	ND	80	80	76.0	77.4	95	97	70-130	2	20		
Vanadium, Dissolved	ug/L	ND	80	80	81.0	79.8	101	100	70-130	2	20		
Zinc, Dissolved	ug/L	ND	80	80	82.3	80.1	99	96	70-130	3	20		

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampling

Pace Project No.: 60132534

QC Batch: MPRP/20564 Analysis Method: EPA 200.8

QC Batch Method: EPA 200.8 Analysis Description: 200.8 Potentially Dissolved Metals

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

METHOD BLANK: 1102268 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Aluminum, Dissolved	ug/L	ND	50.0	11/26/12 18:25	
Antimony, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Arsenic, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Barium, Dissolved	ug/L	0.49J	1.0	11/26/12 18:25	
Beryllium, Dissolved	ug/L	ND	0.50	11/26/12 18:25	
Cadmium, Dissolved	ug/L	ND	0.50	11/26/12 18:25	
Chromium, Dissolved	ug/L	0.36J	1.0	11/26/12 18:25	
Cobalt, Dissolved	ug/L	0.10J	1.0	11/26/12 18:25	
Copper, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Iron, Dissolved	ug/L	15.9J	50.0	11/26/12 18:25	
Manganese, Dissolved	ug/L	0.25J	1.0	11/26/12 18:25	
Molybdenum, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Nickel, Dissolved	ug/L	0.48J	1.0	11/26/12 18:25	
Selenium, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Silver, Dissolved	ug/L	ND	0.50	11/26/12 18:25	
Thallium, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Vanadium, Dissolved	ug/L	ND	1.0	11/26/12 18:25	
Zinc, Dissolved	ug/L	6.3J	10.0	11/26/12 18:25	

LABORATORY CONTROL SAMPLE: 1102269

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	1000	1060	106	85-115	
Antimony, Dissolved	ug/L	40	41.0	102	85-115	
Arsenic, Dissolved	ug/L	40	41.1	103	85-115	
Barium, Dissolved	ug/L	40	40.6	102	85-115	
Beryllium, Dissolved	ug/L	40	43.6	109	85-115	
Cadmium, Dissolved	ug/L	40	40.4	101	85-115	
Chromium, Dissolved	ug/L	40	40.6	101	85-115	
Cobalt, Dissolved	ug/L	40	39.4	98	85-115	
Copper, Dissolved	ug/L	40	39.4	99	85-115	
Iron, Dissolved	ug/L	1000	1010	101	85-115	
Manganese, Dissolved	ug/L	40	40.7	102	85-115	
Molybdenum, Dissolved	ug/L	40	40.1	100	85-115	
Nickel, Dissolved	ug/L	40	40.5	101	85-115	
Selenium, Dissolved	ug/L	40	41.8	104	85-115	
Silver, Dissolved	ug/L	20	19.8	99	85-115	
Thallium, Dissolved	ug/L	40	38.3	96	85-115	
Vanadium, Dissolved	ug/L	40	40.4	101	85-115	
Zinc, Dissolved	ug/L	100	106	106	85-115	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1102270 1102271

Parameter	Units	MS		MSD		MS Result	% Rec	MSD Result	% Rec	% Rec Limits	Max	
		60132534002	Spike Conc.	Spike Conc.	MS Result						RPD	RPD
Aluminum, Dissolved	ug/L	24.2J	1000	1000	1030	1020	100	100	100	70-130	1	20
Antimony, Dissolved	ug/L	0.060J	40	40	39.9	39.5	100	99	99	70-130	1	20
Arsenic, Dissolved	ug/L	0.36J	40	40	40.0	39.2	99	97	97	70-130	2	20
Barium, Dissolved	ug/L	67.7	40	40	109	105	104	94	94	70-130	4	20
Beryllium, Dissolved	ug/L	ND	40	40	40.9	40.8	102	102	102	70-130	0	20
Cadmium, Dissolved	ug/L	ND	40	40	38.7	38.0	97	95	95	70-130	2	20
Chromium, Dissolved	ug/L	0.92J	40	40	40.2	39.8	98	97	97	70-130	1	20
Cobalt, Dissolved	ug/L	0.15J	40	40	37.8	37.2	94	93	93	70-130	2	20
Copper, Dissolved	ug/L	0.71J	40	40	36.3	36.4	89	89	89	70-130	0	20
Iron, Dissolved	ug/L	235	1000	1000	1220	1220	99	98	98	70-130	1	20
Manganese, Dissolved	ug/L	293	40	40	340	333	118	101	101	70-130	2	20
Molybdenum, Dissolved	ug/L	1.4	40	40	43.0	41.6	104	101	101	70-130	3	20
Nickel, Dissolved	ug/L	ND	40	40	37.2	36.4	93	91	91	70-130	2	20
Selenium, Dissolved	ug/L	0.39J	40	40	37.7	36.7	93	91	91	70-130	3	20
Silver, Dissolved	ug/L	ND	20	20	19.0	18.9	95	94	94	70-130	1	20
Thallium, Dissolved	ug/L	0.027J	40	40	38.1	37.9	95	95	95	70-130	0	20
Vanadium, Dissolved	ug/L	ND	40	40	40.7	40.1	101	100	100	70-130	1	20
Zinc, Dissolved	ug/L	8.9J	100	100	99.9	97.9	91	89	89	70-130	2	20

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	MPRP/20614	Analysis Method:	EPA 200.8
QC Batch Method:	EPA 200.8	Analysis Description:	200.8 Potentially Dissolved Metals
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1104293 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead, Dissolved	ug/L	0.085J	1.0	11/28/12 09:08	

LABORATORY CONTROL SAMPLE: 1104294

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead, Dissolved	ug/L	40	40.6	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1104295 1104296

Parameter	Units	60132534004	MS Spike Result	MSD Spike Result	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Lead, Dissolved	ug/L	1.8	40	40	43.6	44.2	105	106	70-130	1	20	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

QC Batch:	MT/10652	Analysis Method:	SM 2510B
QC Batch Method:	SM 2510B	Analysis Description:	2510B Specific Conductance
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1327652 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Specific Conductance	umhos/cm	ND	10.0	11/06/12 16:44	

LABORATORY CONTROL SAMPLE: 1327653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Specific Conductance	umhos/cm	1000	1000	100	90-110	

SAMPLE DUPLICATE: 1327654

Parameter	Units	10211393003 Result	Dup Result	RPD	Max RPD	Qualifiers
Specific Conductance	umhos/cm	2310	2310	.3	20	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WET/38052	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1093091 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	11/05/12 09:32	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	11/05/12 09:32	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	11/05/12 09:32	

LABORATORY CONTROL SAMPLE: 1093092

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	500	506	101	90-110	

SAMPLE DUPLICATE: 1093093

Parameter	Units	60132434001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24	
Alkalinity, Total as CaCO ₃	mg/L	115	108	6	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	115	108	6	9	

SAMPLE DUPLICATE: 1093094

Parameter	Units	60132263027 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24	
Alkalinity, Total as CaCO ₃	mg/L	182	184	1	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	182	184	1	9	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WET/38090	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK:	1093867	Matrix:	Water
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Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	11/06/12 13:20	

SAMPLE DUPLICATE: 1093868

Parameter	Units	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	60132373003	2030	1990	2	17

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WET/38077	Analysis Method:	SM 2540D
QC Batch Method:	SM 2540D	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	60132534001, 60132534002		

METHOD BLANK:	1093564	Matrix:	Water
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Associated Lab Samples: 60132534001, 60132534002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	11/06/12 10:02	

SAMPLE DUPLICATE: 1093565

Parameter	Units	60132429001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

SAMPLE DUPLICATE: 1093566

Parameter	Units	60132429008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	ND	ND		25	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

QC Batch:	WET/38078	Analysis Method:	SM 2540D
QC Batch Method:	SM 2540D	Analysis Description:	2540D Total Suspended Solids
Associated Lab Samples:	60132534003, 60132534004		

METHOD BLANK: 1093567 Matrix: Water

Associated Lab Samples: 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Suspended Solids	mg/L	ND	5.0	11/06/12 10:10	

SAMPLE DUPLICATE: 1093568

Parameter	Units	60132487002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	8.0	6.0	29	25	D6

SAMPLE DUPLICATE: 1093569

Parameter	Units	60132491003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	158	166	5	25	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WET/38039	Analysis Method:	SM 4500-S-2 D
QC Batch Method:	SM 4500-S-2 D	Analysis Description:	4500S2D Sulfide, Total
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1092529 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	11/02/12 18:13	

LABORATORY CONTROL SAMPLE: 1092530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1092531

Parameter	Units	60132534001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.66	132	75-125	M1

SAMPLE DUPLICATE: 1092532

Parameter	Units	60132534002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WETA/22350	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1093201 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	11/07/12 00:38	
Sulfate	mg/L	ND	1.0	11/07/12 00:38	

LABORATORY CONTROL SAMPLE: 1093202

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE SAMPLE: 1093203

Parameter	Units	60132497003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	570	100	657	86	64-118	
Sulfate	mg/L	189	100	281	92	61-119	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1093204 1093205

Parameter	Units	60132497002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	RPD	Max Qual
Chloride	mg/L	418	100	100	512	505	95	88	64-118	1	12	
Sulfate	mg/L	195	100	100	282	283	87	88	61-119	1	10	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WETA/22698	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1107673 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	ND	0.10	12/03/12 14:42	

LABORATORY CONTROL SAMPLE: 1107674

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1107675

Parameter	Units	60132534001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	0.18	2	2.2	103	90-110	

SAMPLE DUPLICATE: 1107676

Parameter	Units	60132534002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, NO ₂ plus NO ₃	mg/L	0.10	0.23	77	13	D6

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli

Pace Project No.: 60132534

QC Batch:	WETA/22367	Analysis Method:	SM 4500-CN-E
QC Batch Method:	SM 4500-CN-E	Analysis Description:	4500CNE Cyanide, Total
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1093950 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.0050	11/07/12 13:05	

LABORATORY CONTROL SAMPLE: 1093951

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	112	69-126	

MATRIX SPIKE SAMPLE: 1093952

Parameter	Units	60132233001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	0.010	.1	0.12	112	41-136	

SAMPLE DUPLICATE: 1093953

Parameter	Units	60132415001 Result	Dup Result	RPD	Max RPD	Qualifiers
Cyanide	mg/L	0.026	ND		26	

QUALITY CONTROL DATA

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

QC Batch:	WETA/22479	Analysis Method:	SM 5310C
QC Batch Method:	SM 5310C	Analysis Description:	5310C Total Organic Carbon
Associated Lab Samples:	60132534001, 60132534002, 60132534003, 60132534004		

METHOD BLANK: 1099023 Matrix: Water

Associated Lab Samples: 60132534001, 60132534002, 60132534003, 60132534004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	11/16/12 14:21	

LABORATORY CONTROL SAMPLE: 1099024

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.4	88	80-120	

MATRIX SPIKE SAMPLE: 1099025

Parameter	Units	60132534001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	6.7	122	80-120	M1

SAMPLE DUPLICATE: 1099026

Parameter	Units	60132534002 Result	Dup Result	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND	25	

QUALIFIERS

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-K Pace Analytical Services - Kansas City

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

H3 Sample was received or analysis requested beyond the recognized method holding time.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60132534001	DR-1 COMP 20121031	EPA 200.7	MPRP/20563	EPA 200.7	ICP/16734
60132534002	DR-2 COMP 20121031	EPA 200.7	MPRP/20563	EPA 200.7	ICP/16734
60132534003	DR-7 COMP 20121031	EPA 200.7	MPRP/20563	EPA 200.7	ICP/16734
60132534004	DR-4-SW COMP 20121031	EPA 200.7	MPRP/20563	EPA 200.7	ICP/16734
60132534001	DR-1 COMP 20121031	EPA 200.8	MPRP/36303	EPA 200.8	ICPM/14381
60132534002	DR-2 COMP 20121031	EPA 200.8	MPRP/36303	EPA 200.8	ICPM/14381
60132534003	DR-7 COMP 20121031	EPA 200.8	MPRP/36303	EPA 200.8	ICPM/14381
60132534004	DR-4-SW COMP 20121031	EPA 200.8	MPRP/36303	EPA 200.8	ICPM/14381
60132534001	DR-1 COMP 20121031	EPA 200.8	MPRP/36300	EPA 200.8	ICPM/14380
60132534002	DR-2 COMP 20121031	EPA 200.8	MPRP/36300	EPA 200.8	ICPM/14380
60132534003	DR-7 COMP 20121031	EPA 200.8	MPRP/36300	EPA 200.8	ICPM/14380
60132534004	DR-4-SW COMP 20121031	EPA 200.8	MPRP/36300	EPA 200.8	ICPM/14380
60132534001	DR-1 COMP 20121031	EPA 200.8	MPRP/20564	EPA 200.8	ICPM/1864
60132534001	DR-1 COMP 20121031	EPA 200.8	MPRP/20614	EPA 200.8	ICPM/1878
60132534002	DR-2 COMP 20121031	EPA 200.8	MPRP/20564	EPA 200.8	ICPM/1864
60132534002	DR-2 COMP 20121031	EPA 200.8	MPRP/20614	EPA 200.8	ICPM/1878
60132534003	DR-7 COMP 20121031	EPA 200.8	MPRP/20564	EPA 200.8	ICPM/1864
60132534003	DR-7 COMP 20121031	EPA 200.8	MPRP/20614	EPA 200.8	ICPM/1878
60132534004	DR-4-SW COMP 20121031	EPA 200.8	MPRP/20564	EPA 200.8	ICPM/1864
60132534004	DR-4-SW COMP 20121031	EPA 200.8	MPRP/20614	EPA 200.8	ICPM/1878
60132534001	DR-1 COMP 20121031	EPA 245.1	MERP/7755	EPA 245.1	MERC/8688
60132534002	DR-2 COMP 20121031	EPA 245.1	MERP/7755	EPA 245.1	MERC/8688
60132534003	DR-7 COMP 20121031	EPA 245.1	MERP/7755	EPA 245.1	MERC/8688
60132534004	DR-4-SW COMP 20121031	EPA 245.1	MERP/7755	EPA 245.1	MERC/8688
60132534001	DR-1 COMP 20121031	EPA 245.1	MERP/7756	EPA 245.1	MERC/8689
60132534002	DR-2 COMP 20121031	EPA 245.1	MERP/7756	EPA 245.1	MERC/8689
60132534003	DR-7 COMP 20121031	EPA 245.1	MERP/7756	EPA 245.1	MERC/8689
60132534004	DR-4-SW COMP 20121031	EPA 245.1	MERP/7756	EPA 245.1	MERC/8689
60132534001	DR-1 COMP 20121031	EPA 245.1	MERP/6851	EPA 245.1	MERC/6811
60132534002	DR-2 COMP 20121031	EPA 245.1	MERP/6851	EPA 245.1	MERC/6811
60132534003	DR-7 COMP 20121031	EPA 245.1	MERP/6851	EPA 245.1	MERC/6811
60132534004	DR-4-SW COMP 20121031	EPA 245.1	MERP/6851	EPA 245.1	MERC/6811
60132534001	DR-1 COMP 20121031	SM 2510B	MT/10652		
60132534002	DR-2 COMP 20121031	SM 2510B	MT/10652		
60132534003	DR-7 COMP 20121031	SM 2510B	MT/10652		
60132534004	DR-4-SW COMP 20121031	SM 2510B	MT/10652		
60132534001	DR-1 COMP 20121031	Calculated	MT/10659		
60132534002	DR-2 COMP 20121031	Calculated	MT/10659		
60132534003	DR-7 COMP 20121031	Calculated	MT/10659		
60132534004	DR-4-SW COMP 20121031	Calculated	MT/10659		
60132534001	DR-1 COMP 20121031	SM 2320B	WET/38052		

Date: 12/03/2012 04:53 PM

REPORT OF LABORATORY ANALYSIS

Page 40 of 41

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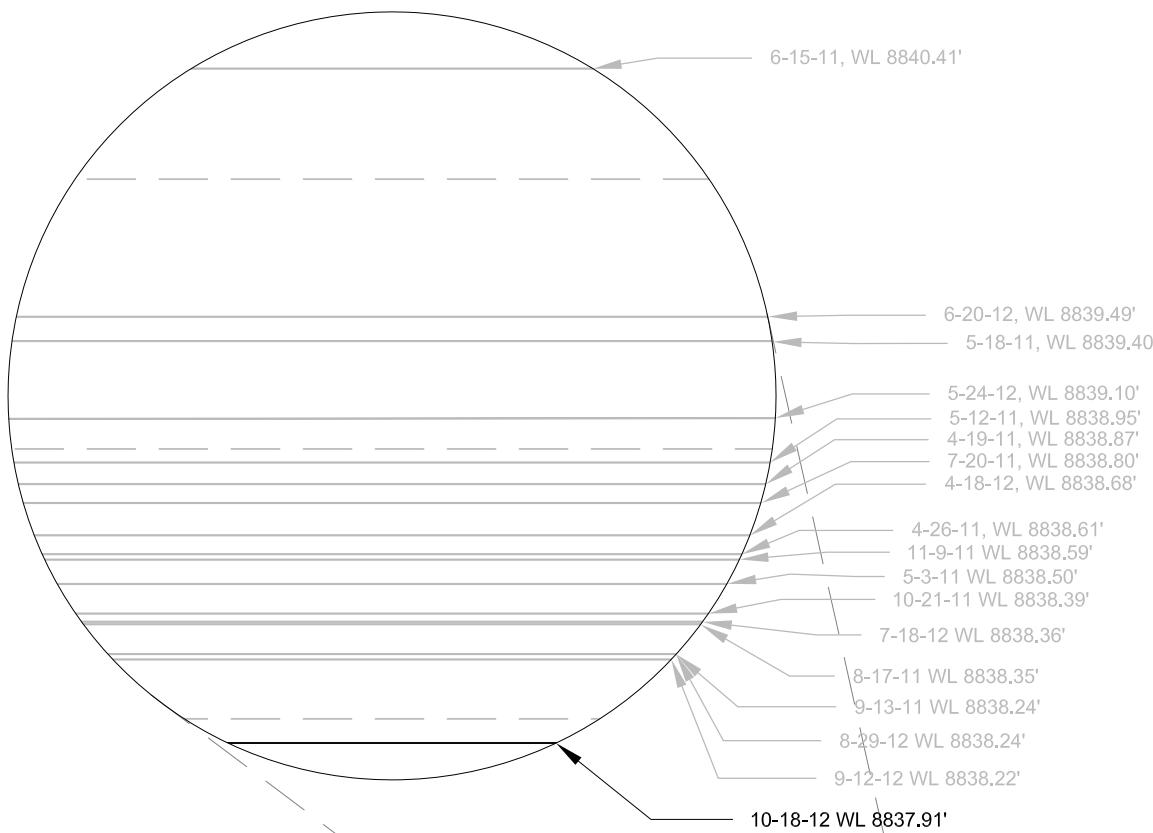
QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: October 2012 Rico Water Sampli
Pace Project No.: 60132534

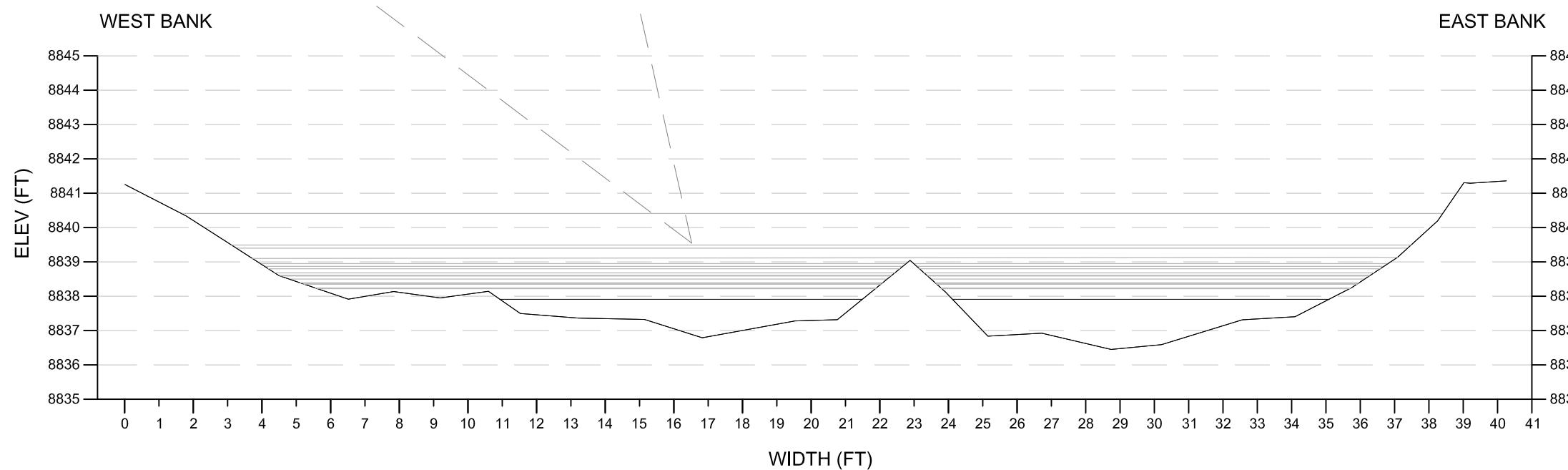
Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60132534002	DR-2 COMP 20121031	SM 2320B	WET/38052		
60132534003	DR-7 COMP 20121031	SM 2320B	WET/38052		
60132534004	DR-4-SW COMP 20121031	SM 2320B	WET/38052		
60132534001	DR-1 COMP 20121031	SM 2540C	WET/38090		
60132534002	DR-2 COMP 20121031	SM 2540C	WET/38090		
60132534003	DR-7 COMP 20121031	SM 2540C	WET/38090		
60132534004	DR-4-SW COMP 20121031	SM 2540C	WET/38090		
60132534001	DR-1 COMP 20121031	SM 2540D	WET/38077		
60132534002	DR-2 COMP 20121031	SM 2540D	WET/38077		
60132534003	DR-7 COMP 20121031	SM 2540D	WET/38078		
60132534004	DR-4-SW COMP 20121031	SM 2540D	WET/38078		
60132534001	DR-1 COMP 20121031	SM 4500-S-2 D	WET/38039		
60132534002	DR-2 COMP 20121031	SM 4500-S-2 D	WET/38039		
60132534003	DR-7 COMP 20121031	SM 4500-S-2 D	WET/38039		
60132534004	DR-4-SW COMP 20121031	SM 4500-S-2 D	WET/38039		
60132534001	DR-1 COMP 20121031	EPA 300.0	WETA/22350		
60132534002	DR-2 COMP 20121031	EPA 300.0	WETA/22350		
60132534003	DR-7 COMP 20121031	EPA 300.0	WETA/22350		
60132534004	DR-4-SW COMP 20121031	EPA 300.0	WETA/22350		
60132534001	DR-1 COMP 20121031	EPA 353.2	WETA/22698		
60132534002	DR-2 COMP 20121031	EPA 353.2	WETA/22698		
60132534003	DR-7 COMP 20121031	EPA 353.2	WETA/22698		
60132534004	DR-4-SW COMP 20121031	EPA 353.2	WETA/22698		
60132534001	DR-1 COMP 20121031	SM 4500-CN-E	WETA/22367		
60132534002	DR-2 COMP 20121031	SM 4500-CN-E	WETA/22367		
60132534003	DR-7 COMP 20121031	SM 4500-CN-E	WETA/22367		
60132534004	DR-4-SW COMP 20121031	SM 4500-CN-E	WETA/22367		
60132534001	DR-1 COMP 20121031	SM 5310C	WETA/22479		
60132534002	DR-2 COMP 20121031	SM 5310C	WETA/22479		
60132534003	DR-7 COMP 20121031	SM 5310C	WETA/22479		
60132534004	DR-4-SW COMP 20121031	SM 5310C	WETA/22479		

Appendix E

Flow Cross Sections



DR-1 CROSS SECTION



CROSS SECTION AT DR-1
 SCALE - 1" = 4'

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General Notes		
<i>[Large empty area for notes]</i>		
Scale in Feet		
0	2	4
No.	Revision/Issue	Date

ATLANTIC RICHFIELD
COMPANY



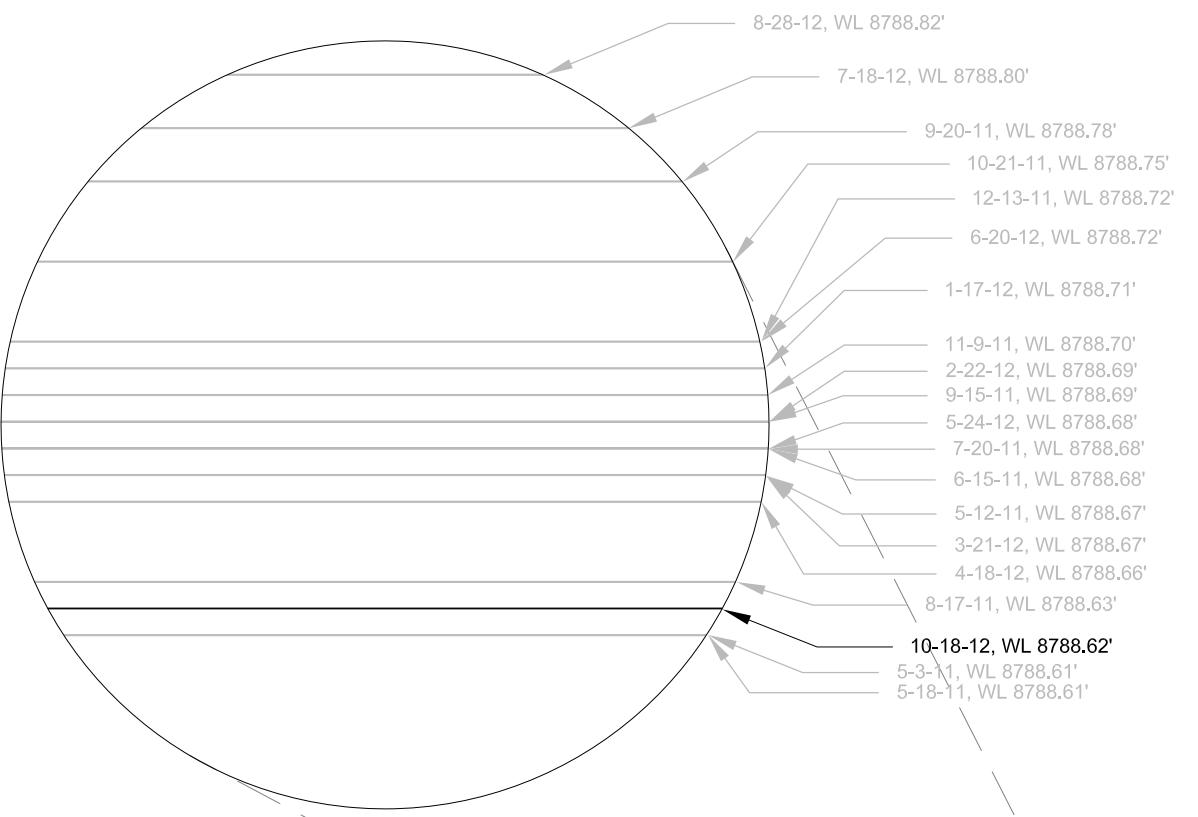
ANDERSON
ENGINEERING COMPANY, INC.

DRAWN BY: MAD
ENGINEER: CS, MAD
APPROVED:

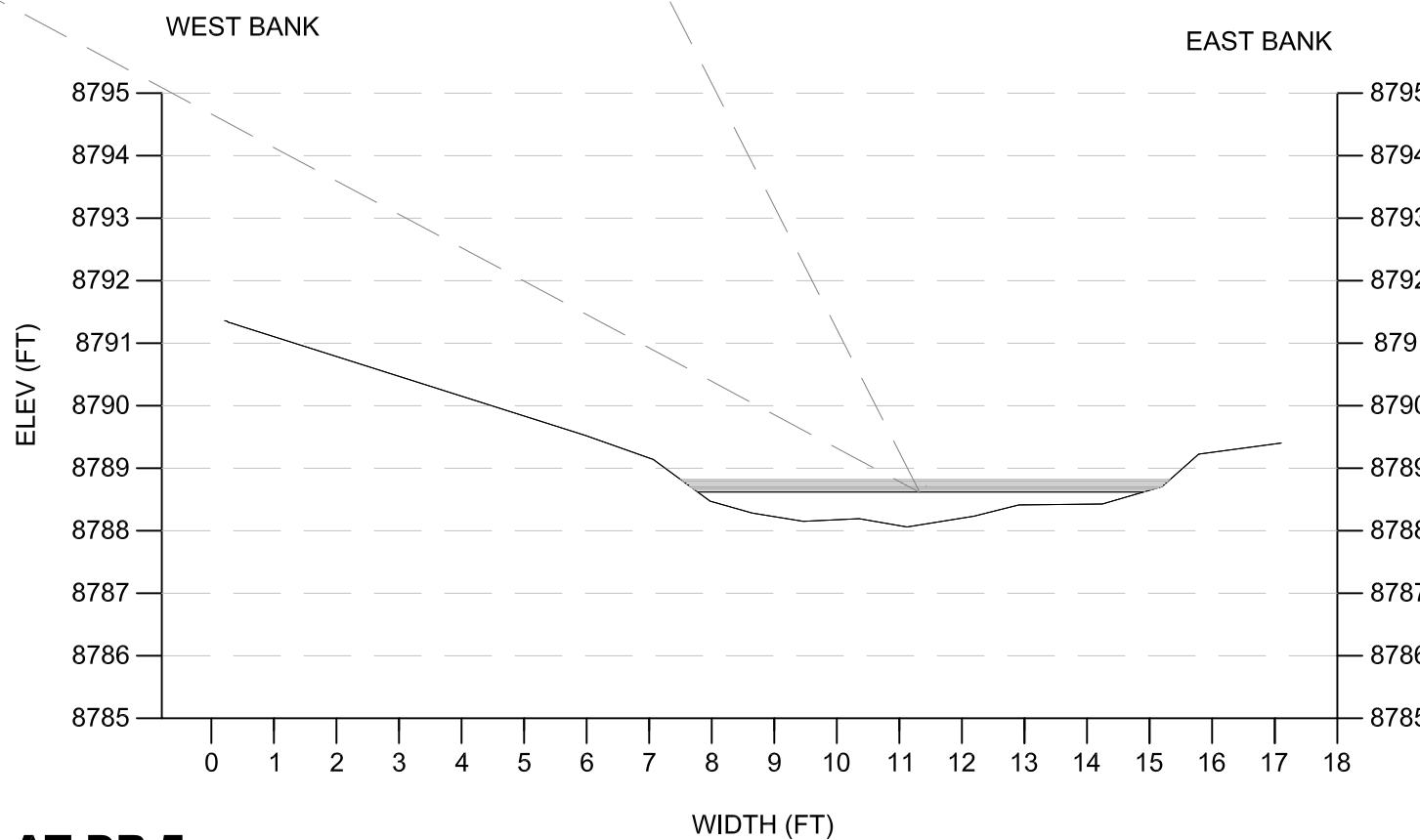
**RICO SURFACE
WATER SAMPLING**
**DOLORES RIVER CROSS
SECTION AT SAMPLING
STATION DR-1**
RICO, CO

Project	Figure
Date	18-OCT-2012
Scale	

3



DR-5 CROSS SECTION



CROSS SECTION AT DR-5
SCALE - 1" = 3'

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General Notes

Scale in Feet
0 1.5 3

No.	Revision/Issue	Date
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ATLANTIC RICHFIELD COMPANY



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ENGINEER: CS, MAD
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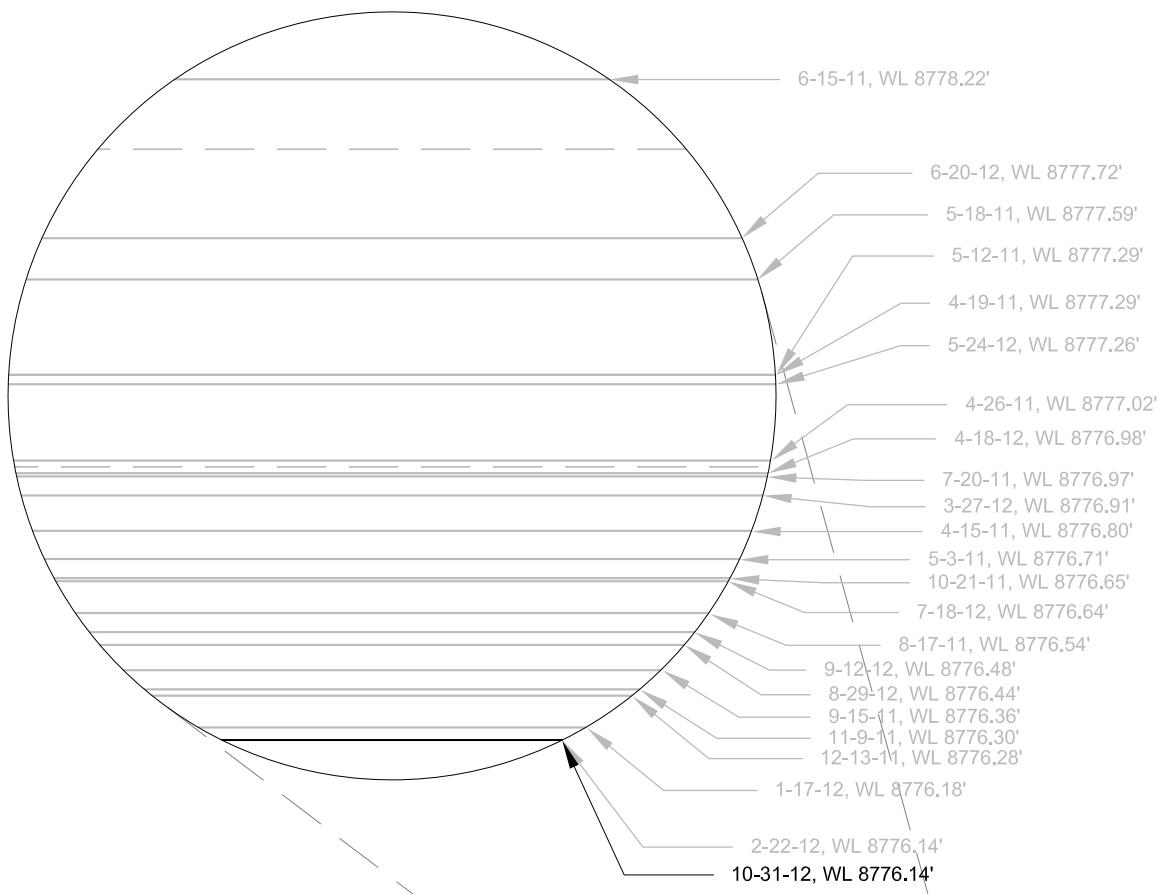
**RICO SURFACE
WATER SAMPLING**

**POND 8 EMBANKMENT
CROSS SECTION AT
SAMPLING STATION DR-5**

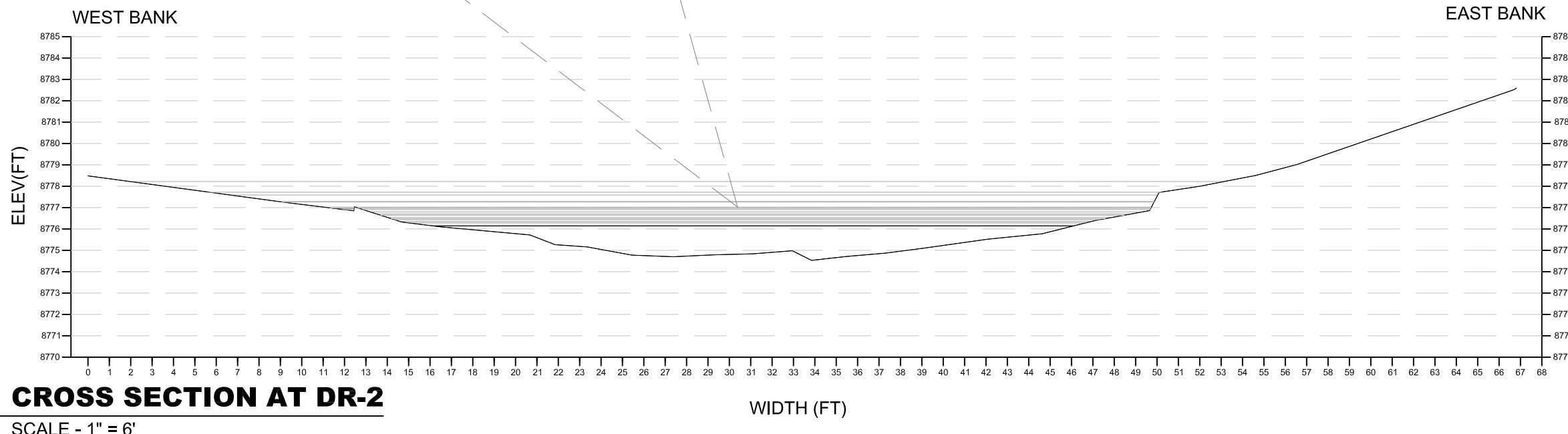
RICO, CO

Project	Figure
Date	18-OCT-2012
Scale	

4



DR-2 CROSS SECTION



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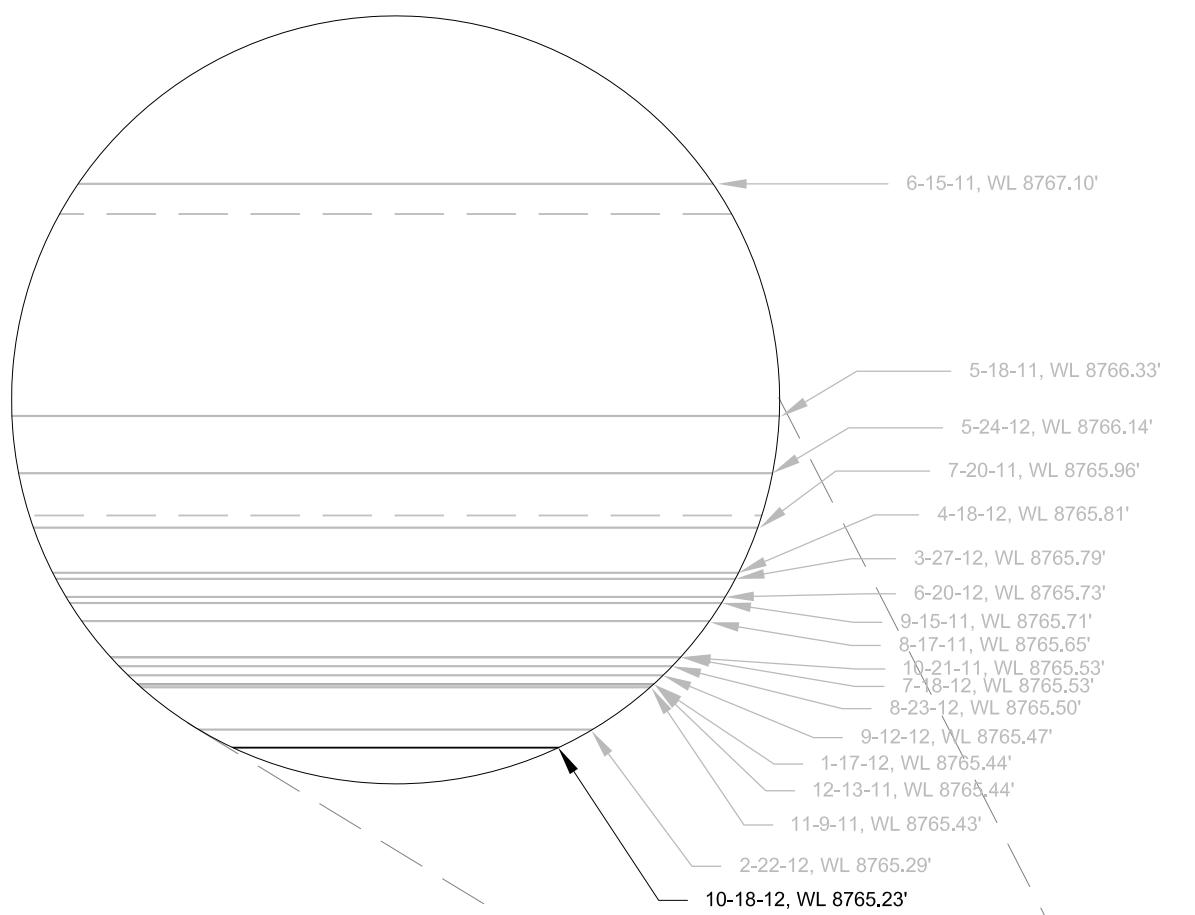
General Notes		
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Scale in Feet 		
No.	Revision/Issue	Date
ATLANTIC RICHFIELD COMPANY		



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ENGINEER: CS, MAD
APPROVED:

**RICO SURFACE
WATER SAMPLING**
**DOLORES RIVER CROSS
SECTION AT SAMPLING
STATION DR-2**
RICO, CO

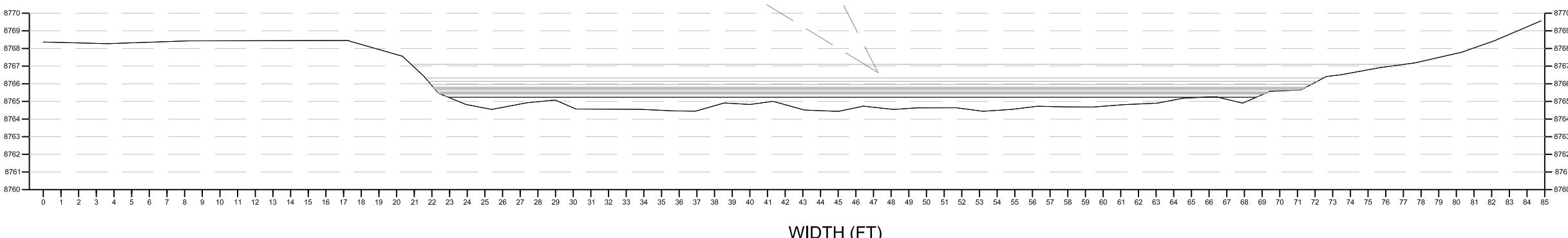
Project	Figure
Date 31-OCT-2012	Scale
5	



DR-7 CROSS SECTION

WEST BANK

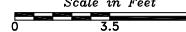
EAST BANK



CROSS SECTION AT DR-7

SCALE - 1" = 7'

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General Notes		
<i>Scale in Feet</i> 		
No.	Revision/Issue	Date

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COMPANY



ANDERSON
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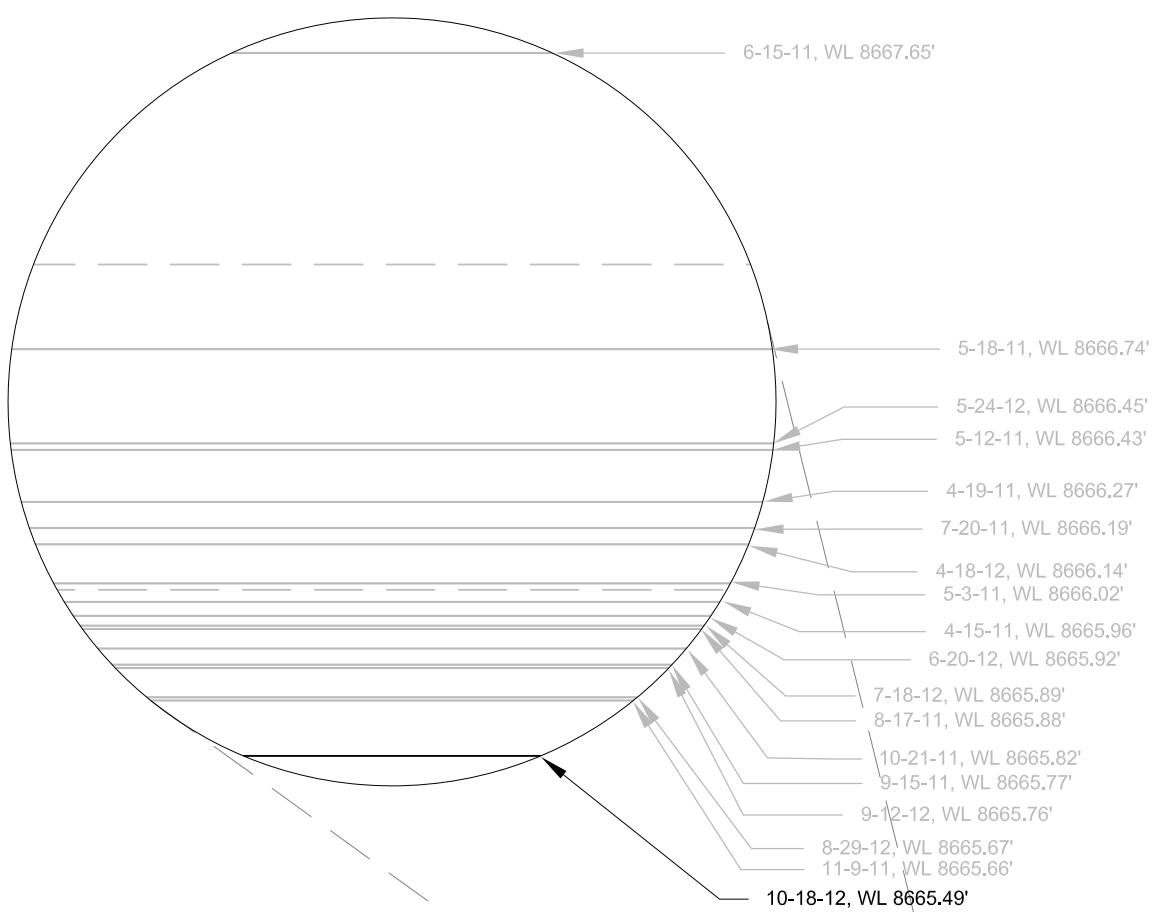
DRAWN BY: MAD
ENGINEER: CS, MAD
APPROVED:

RICO SURFACE WATER SAMPLING

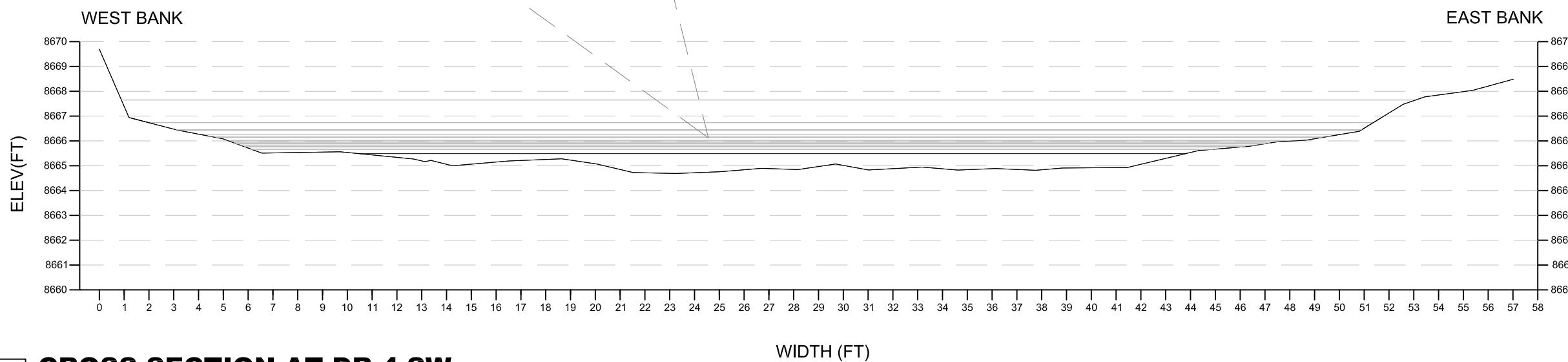
DOLORES RIVER CROSS SECTION AT SAMPLING STATION DR-7

RICO CO

Project	Figure
Date	18-OCT-2012
Scale	



DR-4-SW CROSS SECTION



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General Notes		
Scale in Feet		
0 2.5 5		
No.	Revision/Issue	Date

ATLANTIC RICHFIELD COMPANY



ANDERSON
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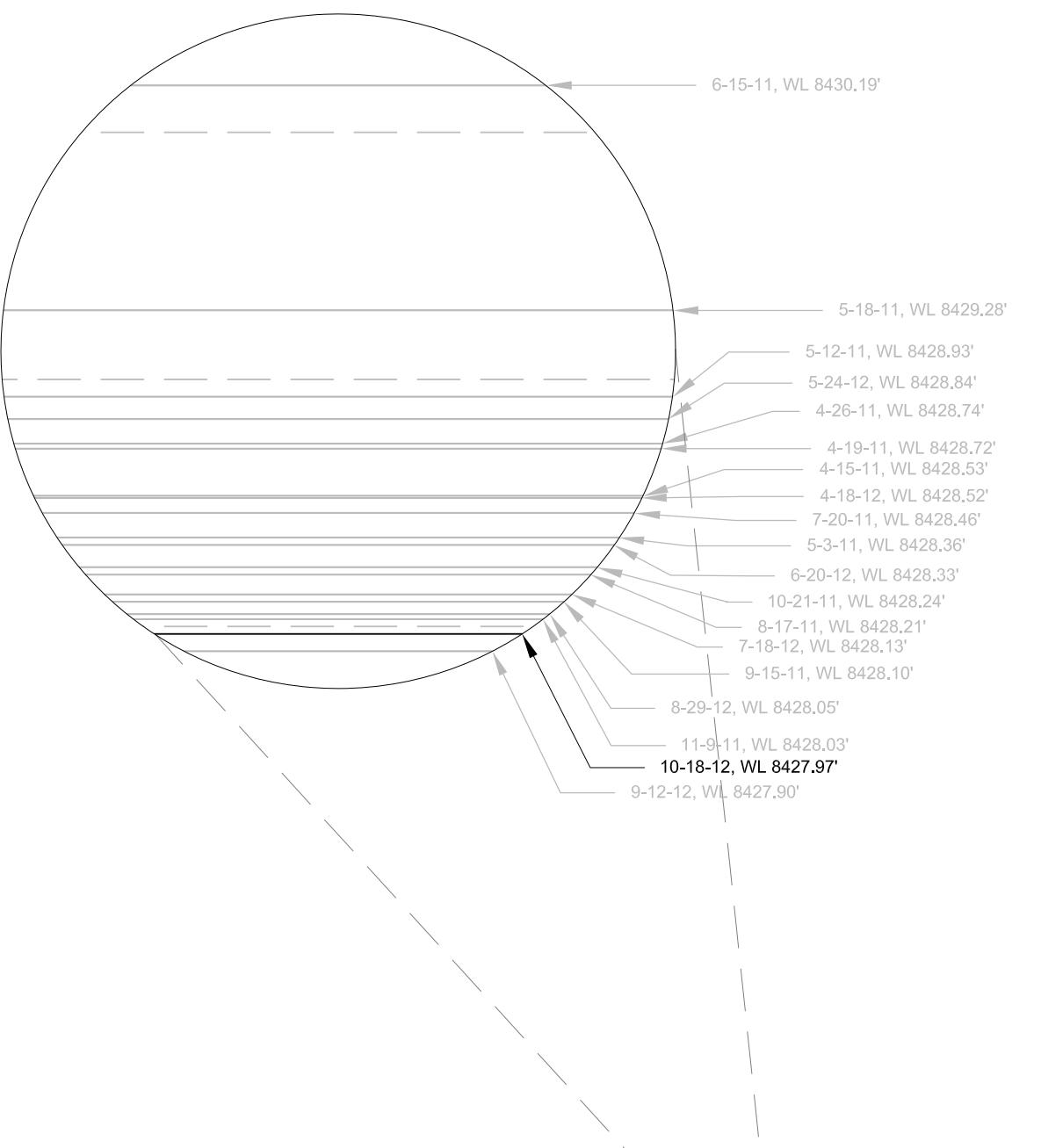
DRAWN BY: MAD
ENGINEER: CS, MAD
APPROVED:

RICO SURFACE
WATER SAMPLING

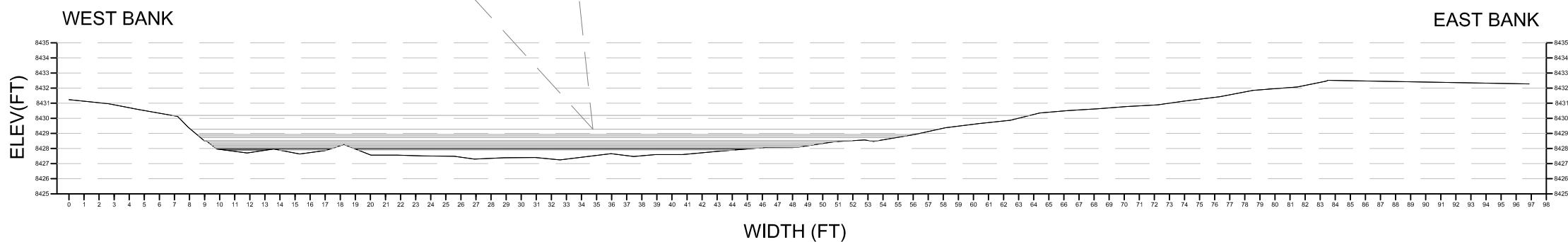
DOLORES RIVER CROSS
SECTION AT SAMPLING
STATION DR-4-SW

RICO, CO

Project	Figure
Date	18-OCT-2012
Scale	



DR-G CROSS SECTION



CROSS SECTION AT DR-G

SCALE - 1" = 9'

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General Notes		
<i>Scale in Feet</i> 		
No.	Revision/Issue	Date

ATLANTIC RICHFIELD
COMPANY



ANDERSON
ENGINEERING COMPANY, INC.

DRAWN BY: MAB

ENGINEER: CS MAD

APPROVED:

RICO SURFACE WATER SAMPLING

DOLORES RIVER CROSS SECTION AT SAMPLING STATION DR-G

RICO CO

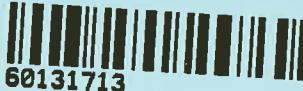
Project	Figure
Date	18-OCT-2012
Scale	

Appendix F
Chain of Custody Records



Sample Condition Upon Receipt
ESI Tech Spec Client

WO# : 60131713



Client Name:	<u>Br Anderson</u>	Project #:			Optional																																																																											
Courier:	Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Other <input type="checkbox"/>																																																																															
Tracking #:	<u>See Attached</u>	Pace Shipping Label Used?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Proj Due Date:																																																																											
Custody Seal on Cooler/Box Present:		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Seals intact:	Yes <input checked="" type="checkbox"/>																																																																											
Packing Material:		Bubble Wrap <input type="checkbox"/>	Bubble Bags <input checked="" type="checkbox"/>	Foam <input type="checkbox"/>	None <input type="checkbox"/>																																																																											
Thermometer Used:		<u>T-194</u>	Type of Ice:	Wet <input type="checkbox"/> Blue <input type="checkbox"/> None <input type="checkbox"/>	Samples received on ice, cooling process has begun.																																																																											
Cooler Temperature:		<u>5.1 5.5 5.6 5.4</u>	(circle one)	Date and initials of person examining contents: <u>John Tolosa</u>																																																																												
Temperature should be above freezing to 6°C <u>5.6 5.7 5.7 5.9</u>																																																																																
<table border="1"> <tr> <td>Chain of Custody present:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>1.</td> </tr> <tr> <td>Chain of Custody filled out:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>2.</td> </tr> <tr> <td>Chain of Custody relinquished:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>3.</td> </tr> <tr> <td>Sampler name & signature on COC:</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>4.</td> </tr> <tr> <td>Samples arrived within holding time:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>5.</td> </tr> <tr> <td>Short Hold Time analyses (<72hr):</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>6. TSS > 48 hr left in hold time</td> </tr> <tr> <td>Rush Turn Around Time requested:</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>7.</td> </tr> <tr> <td>Sufficient volume:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>8.</td> </tr> <tr> <td>Correct containers used:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td></td> </tr> <tr> <td>Pace containers used:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>9.</td> </tr> <tr> <td>Containers intact:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>10.</td> </tr> <tr> <td>Unpreserved 5035A soils frozen w/in 48hrs?</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</td> <td>11.</td> </tr> <tr> <td>Filtered volume received for dissolved tests?</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>12.</td> </tr> <tr> <td>Sample labels match COC:</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td></td> </tr> <tr> <td>Includes date/time/ID/analyses</td> <td>Matrix: <u>~</u></td> <td>13.</td> </tr> <tr> <td>All containers needing preservation have been checked.</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td></td> </tr> <tr> <td>All containers needing preservation are found to be in compliance with EPA recommendation.</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</td> <td>14.</td> </tr> <tr> <td>Exceptions: VOA, coliform, <u>O&G</u>, O&G, WI-DRO (water), Phenolics</td> <td><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</td> <td>Initial when completed</td> <td>Lot # of added preservative</td> </tr> <tr> <td>Trip Blank present:</td> <td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A</td> <td colspan="3"></td> </tr> <tr> <td>Pace Trip Blank lot # (if purchased):</td> <td></td> <td>15.</td> <td colspan="2"></td> </tr> <tr> <td>Headspace in VOA vials (>6mm):</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</td> <td colspan="3"></td> </tr> <tr> <td>Project sampled in USDA Regulated Area:</td> <td><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A</td> <td colspan="3">17. List State:</td> </tr> </table>						Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	Sampler name & signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. TSS > 48 hr left in hold time	Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	Filtered volume received for dissolved tests?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		Includes date/time/ID/analyses	Matrix: <u>~</u>	13.	All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.	Exceptions: VOA, coliform, <u>O&G</u> , O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed	Lot # of added preservative	Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A				Pace Trip Blank lot # (if purchased):		15.			Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A				Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:		
Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.																																																																														
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.																																																																														
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.																																																																														
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Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.																																																																														
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. TSS > 48 hr left in hold time																																																																														
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.																																																																														
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.																																																																														
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A																																																																															
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.																																																																														
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.																																																																														
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.																																																																														
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All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.																																																																														
Exceptions: VOA, coliform, <u>O&G</u> , O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed	Lot # of added preservative																																																																													
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Pace Trip Blank lot # (if purchased):		15.																																																																														
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A																																																																															
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:																																																																														

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: John

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: 14:22 16:19 Start: 16:34 17:37
End: 14:42 16:26 End 16:35 17:55
Temp: Temp:



Sample Condition Upon Receipt

WO# : 60132534



60132534

Client Name: <u>Anderson Eng.</u>		Project #:			Optional Proj Due Date: Proj Name:
Courier: Fed Ex <input type="checkbox"/> UPS <input checked="" type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Other <input type="checkbox"/>		Pace Shipping Label Used? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Tracking #: <u>1Z733W81Y049159896</u>		Seals intact: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Custody Seal on Cooler/Box Present: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Foam <input type="checkbox"/> None <input type="checkbox"/> Other <input checked="" type="checkbox"/> Zpk			
Packing Material: Bubble Wrap <input type="checkbox"/> Bubble Bags <input checked="" type="checkbox"/>		Type of Ice: Wet <input checked="" type="checkbox"/> Blue <input type="checkbox"/> None <input type="checkbox"/> Samples received on ice, cooling process has begun. (circle one)			
Thermometer Used: <u>T-191 T-194</u>		Cooler Temperature: <u>4.7</u>		Date and initials of person examining contents: <u>11/21/12</u> <u>SD</u>	
Temperature should be above freezing to 6°C					
Chain of Custody present:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Chain of Custody filled out:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Chain of Custody relinquished:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Sampler name & signature on COC:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples arrived within holding time:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	6. <u>No³</u>
Rush Turn Around Time requested:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Sufficient volume:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Correct containers used:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
Pace containers used:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Containers intact:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	11.
Unpreserved 5035A soils frozen w/in 48hrs?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	12.
Filtered volume received for dissolved tests?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
Sample labels match COC:		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Includes date/time/ID/analyses Matrix:		<u>WT</u>			
All containers needing preservation have been checked.		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	Initial when completed
Trip Blank present:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased):				15.	
Headspace in VOA vials (>6mm):		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CAMWDate 11/21/12



ANDERSON ENGINEERING COMPANY, INC.

977 West 2100 South
Salt Lake City, UT 84119
(801) 972-6222
FAX (801) 972-6235

Project: October 2012 Rico Water Sampling

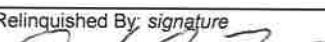
Contact: Mark DeFriez (801) 234-9583

CHAIN OF CUSTODY RECORD

COC# _____
Page 1 of 1

60132534

S E R I E S	Analysis Requested								Matrix Codes (W) Water (S) Soil (L) Liquid	QC: (circle one) <input type="radio"/> I <input type="radio"/> II <input type="radio"/> III <input type="radio"/> IV
	Acid Base Hardness / Soft Metal	S	S /	N / Nitrate						

Relinquished By: signature 	Date 11/12	Time 2pm	Received By: signature E Brackett	Date 11/21/17	Time 0820	Special Instructions 4-T Y N Y
Relinquished By: signature	Date	Time	Received By: signature	Date	Time	
Relinquished By: signature	Date	Time	Received By: signature	Date	Time	
Relinquished By: signature P	Date	Time	Received By: signature	Date	Time	

Chain of Custody

This image shows a rectangular bronze seal impression. The characters are inscribed in seal script (篆文) and read from right to left. The characters are: 齊大司馬 (Qí Dà Sīmǎ), which translates to 'The Great司马 of Qi'. The seal is made of bronze and has a slightly irregular shape with some wear.

三

110712

1130

10211330



Workorder: 60132534

Workorder Name:October 2012 Rico Water Sampl

Owner Received Date: 11/2/2012 Results Requested By: 11/14/2012

Report To		Subcontract To				Requested Analysis										
Heather Wilson Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759		Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700														
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers					Comments					
						HNO ₃										
1	DR-1 COMP 20121031	PS	10/31/2012 12:30	60132534001	Water	4				X	X	X	X			
2	DR-2 COMP 20121031	PS	10/31/2012 13:50	60132534002	Water	4				X	X	X	X			
3	DR-7 COMP 20121031	PS	10/31/2012 14:20	60132534003	Water	4				X	X	X	X			
4	DR-4-SW COMP 20121031	PS	10/31/2012 15:55	60132534004	Water	4				X	X	X	X			
5																
											LAB USE ONLY					
Transfers	Released By	Date/Time		Received By			Date/Time		Use Profile 26985							
1		10/31/2012		TN/Pace			10/31/2012									
2																
3																
Cooler Temperature on Receipt <u>2.5</u> °C						Custody Seal	<u>Y</u> or <u>N</u>	Received on Ice <u>Y</u> or <u>N</u>			Samples Intact <u>Y</u> or <u>N</u>					



Document Name:
Sample Condition Upon Receipt Form
Document No.:
F-MN-L-213-rev.04

Document Revised: 22Aug2012
Page 1 of 1
Issuing Authority:
Pace Minnesota Quality Office

Sample Condition
Upon Receipt

Client Name:

Pace KS

Project #:

WO# : 10211550

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Tracking Number: 5446 8864 3794



Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: Proj. Name: _____

Packing Material: Bubble Wrap Bubble Bags None Other: _____ Temp Blank? Yes No

Thermometer Used: B88A912167504 80512447 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature: 2.5 Biological Tissue Frozen? Yes No Date and Initials of Person Examining Contents: 110712 TT
Temp should be above freezing to 6°C

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used? -Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. COC states 4 containers each received 2 each
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13. All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>12)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input checked="" type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed: TN Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____

Date: 11/7/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Chain of Custody



Workorder: 60132534

Workorder Name: October 2012 Rico Water Sampl

Owner Received Date: 11/2/2012 Results Requested By: 11/14/2012

Report To		Subcontract To		Requested Analysis															
Heather Wilson Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759		Pace Analytical Billings MT 602 S 25th Street Billings, MT, MT 591014549 Phone (406) 254-7226																	
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers					Salinity								
						none													
1	DR-1 COMP 20121031	PS	10/31/2012 12:30	60132534001	Water	1					X							10/21/408	
2	DR-2 COMP 20121031	PS	10/31/2012 13:50	60132534002	Water	1					X							001	
3	DR-7 COMP 20121031	PS	10/31/2012 14:20	60132534003	Water	1					X							002	
4	DR-4-SW COMP 20121031	PS	10/31/2012 15:55	60132534004	Water	1					X							003	
5																		004	
															Comments				
Transfers	Released By		Date/Time	Received By			Date/Time												
1			11/1/12 17:00																
2			11/6/12 10:28	Norma C Hanke/Pace			11/6/12 10:28												
Cooler Temperature on Receipt			0.6 °C	Custody Seal <input checked="" type="checkbox"/> or N		Received on Ice <input checked="" type="checkbox"/> or N		Samples Intact <input checked="" type="checkbox"/> or N											



Document Name:
Sample Condition Upon Receipt Form
Document No.:
F-MT-C-184-rev.01

Document Revised: 27Jul2012
Page 1 of 1
Issuing Authority:
Pace Minnesota Quality Office

Sample Condition
Upon Receipt

Client Name:

Pace KS

Project #:

WO# : 10211408

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Tracking Number: 544688643669



Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: Proj. Name:

Packing Material: Bubble Wrap Bubble Bags None Other: _____ Temp Blank? Yes No

Thermometer Used: 1383045 135 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature: 0.6 Biological Tissue Frozen? Yes No Date and Initials of Person Examining Contents: NCY 11/6/13
Temp should be above freezing to 6°C

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix: H2O		
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed: _____ Lot # of added preservative: _____
Samples checked for dechlorination?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____

Project Manager Review:

Date: 11-6-13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, Incorrect containers)



ANDERSON
ENGINEERING COMPANY INC.

977 West 2100 South
Salt Lake City, UT 84119
(801) 972-6222
FAX (801) 972-6235

Project: October 2012 Rico Water Sampling

Contact: Mark DeFriez (801) 234-9583

CHAIN OF CUSTODY RECORD

COC#
Page 1 of 2

QC: (circle one)
I II III IV

10/19/12

Field Location	Field Sample ID Number	Date	Time	Matrix	No. of Containers	Analysis Requested						Matrix Codes (W) Water (S) Soil (L) Liquid	Comments	
						Total Metals / Hardness / Silica	Potentially Dissolved Metals	Dissolved Metals	Alkalinity / TDS / TSS / Sulfate / Chloride	Cyanide	Salinity	Total Organic Carbon / Nitrate		
DR-1	DR-1_20121017	10/17/2012	4:01 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-2	DR-2_20121017	10/18/2012	12:38 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-3	DR-3_20121017	10/17/2012	3:30 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-4	DR-4_20121017	10/17/2012	12:29 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-5	DR-5_20121017	10/18/2012	12:46 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-6	DR-6_20121017	10/18/2012	12:17 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-7	DR-7_20121017	10/18/2012	12:56 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-8	DR-8_20121017	10/17/2012	3:50 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-4-SW	DR-4-SW_20121017	10/18/2012	1:09 AM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
DR-G	DR-G_20121017	10/18/2012	1:31 AM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
FB	FB_20121017	10/18/2012	10:45 AM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
GW-1	GW-1_20121017	10/17/2012	3:58 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
GW-3	GW-3_20121017	10/18/2012	10:27 AM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
GW-4	GW-4_20121017	10/18/2012	4:50 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
GW-5	GW-5_20121017	10/17/2012	4:17 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
GW-6	GW-6_20121017	10/17/2012	5:02 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
GW-7	GW-7_20121017	10/17/2012	4:41 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
EB-1	EB-1_20121017	10/17/2012	4:26 PM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
EB-2	EB-2_20121017	10/18/2012	9:47 AM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>
MW-1 SHALLOW	MW-1 SHALLOW_20121017	10/18/2012	11:36 AM	W	8	X	X	X	X	X	X	X		<u>DR-1 DR-2 DR-3 DR-4 DR-5 DR-6 DR-7 DR-8 DR-4-SW DR-G FB GW-1 GW-3 GW-4 GW-5 GW-6 GW-7 EB-1 EB-2 MW-1 SHALLOW</u>

Relinquished By: signature	Date	Time	Received By: signature	Date	Time	Special Instructions
	10/19/12	1:18pm		10/20/12	10:20	5.7 5.9 5.6 5.7
Relinquished By: signature						5.5 5.1 5.4 5.6
Relinquished By: signature						
Relinquished By: signature						
Relinquished By: signature						



ANDERSON ENGINEERING COMPANY INC.

977 West 2100 South
Salt Lake City, UT 84119
(801) 972-6222
FAX (801) 972-6235

Project: October 2012 Rico Water Sampling

Contact: Mark DeFriez (801) 234-9583

CHAIN OF CUSTODY RECORD

COC# _____
Page 2 of 2

Sample ID	Analysis Requested						Matrix Codes (W) Water (S) Soil (L) Liquid	QC: (circle one)			
	Solid / Metal	S / Sulfide	S / Sulfate	N / Nitrate	N / Nitrite	N / Nitric		I	II	III	IV

(001317.3)

COMMENTS

Relinquished By: signature 	Date 10/19/12	Time 1515pm	Received By: signature 	Date 10/22/12	Time 1020	Special Instructions 5.7 5.9 5.6 5.7 5.4 5.1 5.5 5.6
Relinquished By: signature	Date	Time	Received By: signature	Date	Time	
Relinquished By: signature	Date	Time	Received By: signature	Date	Time	
Relinquished By: signature	Date	Time	Received By: signature	Date	Time	

Chain of Custody

12

1122

RUSH

10200113

7

102512

www.pacejobs.com

www.pacejobs.com

Workorder: 60131713

Workorder Name:OCTOBER 2012 RICO WATER SAMPLI **Owner Received Date:** 10/22/2012 **Results Requested By:** 11/1/2012

Page 21
Tuesday, October 23, 2012 1:53:56 PM

Custody Seal Year No.

Received on Ice Y or N /

Samples Intact Yr N

Chain of Custody

(020 0113)



Workorder: 60131713

Workorder Name: OCTOBER 2012 RICO WATER SAMPLI Owner Received Date: 10/22/2012 Results Requested By: 11/1/2012

Report To		Subcontract To		Received Date: 10/22/2012 Results Requested By: 11/1/2012								
Heather Wilson Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759		Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700										
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	HNO3	200.8 Total Metals + Hardness + Silica	200.8 Dissolved Metals	245.1 Total Mercury	245.1 Dissolved Mercury	LAB USE ONLY
1	DR-1_21017	PS	10/17/2012 16:01	60131713001	Water	2		X X X X				
2	DR-2_20121017	PS	10/18/2012 12:38	60131713002	Water	2		X X X X				
3	DR-3_20121017	PS	10/17/2012 15:30	60131713003	Water	2		X X X X				
4	DR-4_20121017	PS	10/17/2012 12:29	60131713004	Water	2		X X X X				
5	DR-5_20121017	PS	10/18/2012 12:46	60131713005	Water	2		X X X X				
6	DR-6_20121017	PS	10/18/2012 12:17	60131713006	Water	2		X X X X				
7	DR-7_20121017	PS	10/18/2012 12:56	60131713007	Water	2		X X X X				
8	DR-8_20121017	PS	10/17/2012 15:50	60131713008	Water	2		X X X X				
9	DR-4-SW_20121017	PS	10/18/2012 01:09	60131713009	Water	2		X X X X				
10	DR-G_20121017	PS	10/18/2012 01:31	60131713010	Water	2		X X X X				
11	FB_20121017	PS	10/18/2012 10:45	60131713011	Water	2		X X X X				
12	GW-1_20121017	PS	10/17/2012 15:58	60131713012	Water	2		X X X X				
13	GW-3_20121017	PS	10/18/2012 10:27	60131713013	Water	2		X X X X				
14	GW-4_20121017	PS	10/18/2012 16:50	60131713014	Water	2		X X X X				
15	GW-5_20121017	PS	10/17/2012 16:17	60131713015	Water	2		X X X X				
16	GW-6_20121017	PS	10/17/2012 17:02	60131713016	Water	2		X X X X				
17	GW-7_20121017	PS	10/17/2012 16:41	60131713017	Water	2		X X X X				
18	EB-1_20121017	PS	10/17/2012 16:26	60131713018	Water	2		X X X X				
19	EB-2_20121017	PS	10/18/2012 09:47	60131713019	Water	2		X X X X				

Document Name:
Sample Condition Upon Receipt Form

Document Revised: 22Aug2012

Page 1 of 1

Document No.:
F-MN-L-213-rev.04Issuing Authority:
Pace Minnesota Quality OfficeSample Condition
Upon Receipt

Client Name:

Pace KS

Project #

WO# : 10210113

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other:

Tracking Number: 5446 8864 Z835

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: Proj. Name:Packing Material: Bubble Wrap Bubble Bags None Other: Temp Blank? Yes NoThermometer Used: 88A912167504 80512447 Type of Ice: Wet Blue None Samples on Ice, cooling process has begunCooler Temperature: 9.0 Biological Tissue Frozen? Yes No Date and Initials of Person Examining Contents: 10/25/12 JN
Temp should be above freezing to 6°C

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct Containers Used? -Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13. All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>12) Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input checked="" type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		Initial when completed: _____ Lot # of added preservative: _____

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted:

Date/Time:

Comments/Resolution: Temp ok metals only.

Project Manager Review:

Date:

10/26/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

<i>Pace Analytical</i>	Document Name: Sample Condition Upon Receipt Form	Document Revised: 22Aug2012 Page 1 of 1
	Document No.: F-MN-L-213-rev.04	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Client Name: <i>Pace ES</i>	Project #:	
Courier:	<input checked="" type="checkbox"/> FedEx <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Commercial <input type="checkbox"/> Pace <input type="checkbox"/> Other: _____		
Tracking Number:	<i>S44688642868</i>		
Custody Seal on Cooler/Box Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Seals Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Packing Material:	<input type="checkbox"/> Bubble Wrap <input checked="" type="checkbox"/> Bubble Bags <input type="checkbox"/> None <input type="checkbox"/> Other: <i>foam</i>	Optional: Proj. Due Date: Proj. Name:	
Thermometer Used:	<input checked="" type="checkbox"/> B88A912167504 <input type="checkbox"/> 80512447	Type of Ice:	<input type="checkbox"/> Wet <input type="checkbox"/> Blue <input type="checkbox"/> None <input type="checkbox"/> Samples on ice, cooling process has begun
Cooler Temperature:	<i>5.6</i>	Biological Tissue Frozen?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Temp should be above freezing to 6°C			Date and Initials of Person Examining Contents: <i>AR 10/25/12</i>
Comments:			
Chain of Custody Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.	
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.	
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.	
Sampler Name and/or Signature on COC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.	
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.	
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.	
Rush Turn Around Time Requested?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<i>7.5 day</i>	
Sufficient Volume?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Containers Intact?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.	
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.	
-Includes Date/Time/ID/Analysis Matrix: <i>SL</i>			
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl	
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Sample #	
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed: _____ Lot # of added preservative: _____	
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.	
Trip Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.	
Pace Trip Blank Lot # (if purchased):			

CLIENT NOTIFICATION/RESOLUTION

 Field Data Required? Yes No

Person Contacted:

Date/Time:

Comments/Resolution:

60131714003 soil Temp. 5.6 °C

Project Manager Review:

10/26/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

Chain of Custody



Workorder: 60131713 Workorder Name: OCTOBER 2012 RICO WATER SAMPLI Owner Received Date: 10/22/2012 Results Requested By: 11/1/2012

Report To	Subcontract To						Requested Analysis														
							Preserved Containers		Salinity												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	none															
1	DR-1_20121017	PS	10/17/2012 16:01	60131713001	Water	1				X											10210088
2	DR-2_20121017	PS	10/18/2012 12:38	60131713002	Water	1				X											001
3	DR-3_20121017	PS	10/17/2012 15:30	60131713003	Water	1				X											002
4	DR-4_20121017	PS	10/17/2012 12:29	60131713004	Water	1				X											003
5	DR-5_20121017	PS	10/18/2012 12:46	60131713005	Water	1				X											004
6	DR-6_20121017	PS	10/18/2012 12:17	60131713006	Water	1				X											005
7	DR-7_20121017	PS	10/18/2012 12:56	60131713007	Water	1				X											006
8	DR-8_20121017	PS	10/17/2012 15:50	60131713008	Water	1				X											007
9	DR-4-SW_20121017	PS	10/18/2012 01:09	60131713009	Water	1				X											008
10	DR-G_20121017	PS	10/18/2012 01:31	60131713010	Water	1				X											009
11	FB_20121017	PS	10/18/2012 10:45	60131713011	Water	1				X											010
12	GW1_20121017	PS	10/17/2012 15:58	60131713012	Water	1				X											011
13	GW3_20121017	PS	10/18/2012 10:27	60131713013	Water	1				X											012
14	GW4_20121017	PS	10/18/2012 16:50	60131713014	Water	1				X											013
15	GW5_20121017	PS	10/17/2012 16:17	60131713015	Water	1				X											014
16	GW6_20121017	PS	10/17/2012 17:02	60131713016	Water	1				X											015
17	GW7_20121017	PS	10/17/2012 16:41	60131713017	Water	1				X											016
18	EB-1_20121017	PS	10/17/2012 16:26	60131713018	Water	1				X											017
19	EB-2_20121017	PS	10/18/2012 09:47	60131713019	Water	1				X											018
																					019

Chain of Custody



Workorder: 60131713 Workorder Name: OCTOBER 2012 RICO WATER SAMPLI Owner Received Date: 10/22/2012 Results Requested By: 11/1/2012

Report To		Subcontract To		Requested Analysis																	
Heather Wilson Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759		Pace Analytical Billings MT 602 S 25th Street Billings, MT, MT 591014549 Phone (406) 254-7226																			
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers						Salinity									
						none															
20	MW-1 SHALLOW_20121017	PS	10/18/2012 11:36	60131713020	Water	1					X										10210088
21	MW-1 DEEP_20121017	PS	10/18/2012 11:28	60131713021	Water	1					X										020
22	MW-2 DEEP_20121017	PS	10/18/2012 11:09	60131713022	Water	1					X										021
23	MW-3 DEEP_20121017	PS	10/18/2012 09:26	60131713023	Water	1					X										022
24	MW-4 SHALLOW_20121017	PS	10/18/2012 11:45	60131713024	Water	1					X										023
25	MW-4 DEEP_20121017	PS	10/18/2012 11:55	60131713025	Water	1					X										024
26	MW-5 SHALLOW_20121017	PS	10/18/2012 10:16	60131713026	Water	1					X										025
27	MW-5 DEEP_20121017	PS	10/18/2012 10:37	60131713027	Water	1					X										026
28	MW-6 SHALLOW_20121017	PS	10/18/2012 11:01	60131713028	Water	1					X										027
29	MW-6 DEEP_20121017	PS	10/18/2012 10:54	60131713029	Water	1					X										028
30	BAH-01_20121017	PS	10/19/2012 11:10	60131713030	Water	1					X										029
																				030	
													Comments								
Transfers	Released By		Date/Time	Received By			Date/Time														
1	<i>Heather Wilson</i>		10/22/12 17:00	<i>Heather Wilson - Pace Analytical</i>																	
2	<i>Heather Wilson</i>																				
3																					
Cooler Temperature on Receipt			1.6 °C	Custody Seal	<input checked="" type="radio"/> Y or <input type="radio"/> N	Received on Ice			<input checked="" type="radio"/> Y or <input type="radio"/> N	Samples Intact			<input checked="" type="radio"/> Y or <input type="radio"/> N								

Client Name:

Pace-KS

Project #:

WO# : 10210088

Courier: Fed Ex UPS USPS Client
 Commercial Pace Other: _____

Tracking Number: 544688642916

10210088

Cooler Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: Proj. Name:

Insulation Material: Bubble Wrap Bubble Bags None Other: _____ Temp Blank? Yes No

Thermometer Used: 1383045 135 Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature: 11°C Biological Tissue Frozen? Yes No Date and Initials of Person Examining Contents: Melissa S. H.
Temp should be above freezing to 6°C

Comments:

Chain of Custody Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	1.
Chain of Custody Filled Out?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	2.
Chain of Custody Relinquished?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	3.
Sampler Name and Signature on COC?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	5.
Short Hold Time Analysis (<72 hr)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	6.
Fast Turn Around Time Requested?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	7.
Sufficient Volume?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	8.
Correct Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	9.
-Pace Containers Used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Containers Intact?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	10.
Filtered Volume Received for Dissolved Tests?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11.
Sample Labels Match COC?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	12.
-Includes Date/Time/ID/Analysis Matrix:	<i>H2O</i>			
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , HCl<2; NaOH>12)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		Initial when completed: _____
Samples checked for dechlorination?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	Lot # of added preservative: _____
Headspace in VOA Vials (>6mm)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Trip Blank Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	14.
Trip Blank Custody Seals Present?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	15.
Pace Trip Blank Lot # (if purchased):				16.

CLIENT NOTIFICATION/RESOLUTION

Field Data Required? Yes No

Person Contacted: _____

Date/Time: _____

Comments/Resolution: _____

Project Manager Review:

Date: *10-25-12*
 Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of date, incorrect preservative, out of temp, incorrect containers)

Appendix G

Field Photos

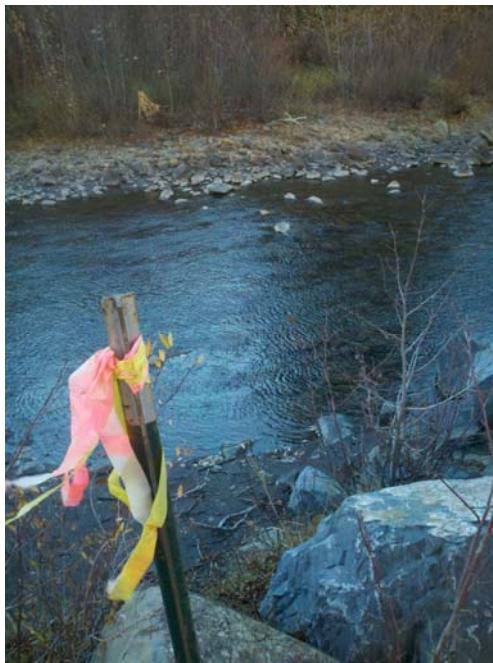
October 2012 Field Photos



Cross Section at Station DR-1



Cross Section at Station DR-5



Cross Section at Station DR-2



Cross Section at Station DR-7

October 2012 Field Photos



Cross Section at Station DR-4-SW



Cross Section at Station DR-G

Appendix H
Field Log Book Records

N-s Rod
st 300 15 1/2 wtr.
0+00
E-W

N-s
st 3+00 Full Rod-
+2S 13 1/2 wtr.
E-W

N+S
050
0+2S 7 40 calcit
E-W

10/15/12 Monday Clear
34°

GW-0	13 <u>73</u>
GW-1	2 <u>73</u>
GW-3	13 <u>44</u>
GW-4	9 <u>77</u>
MW-3D	9 <u>99</u>
MW-3S	Dry
MW-2D	10 <u>12</u>
MW-2S	Dry
MW-1D	9 <u>26</u>
MW-1S	6 <u>19</u>
MW-4D	16 <u>68</u>
MW-4S	16 <u>72</u>
MW-6S	22 <u>90</u>
MW-6D	22 <u>86</u>
GW-7	22 <u>91</u>
GW-5	20 <u>96</u>
EB-1	21 <u>32</u>
GW-6	20 <u>78</u>
EB-2	16 <u>37</u>
MW-5D	16 <u>89</u>
MW-5S	16 <u>44</u>

10/17/12 Wednesday 60° Clear
windy

3:30 DR-3

1663 $\mu\text{s}/\text{cm}$
-5.9 ORP
2.79 DO ppm
6.96 pH
18.94 $^{\circ}\text{C}$

3:50 DR-8

1493 $\mu\text{s}/\text{cm}$
-8.9 ORP
3.07 DO ppm
7.08 pH
18.28 $^{\circ}\text{C}$

3:58 GW-1

364 $\mu\text{s}/\text{cm}$
6.4 ORP
1.13 DO ppm
7.39 pH
16.94 $^{\circ}\text{C}$

4:07 DR-1

328 $\mu\text{s}/\text{cm}$
9.1 ORP
4.17 DO ppm
8.09 pH
9.63 $^{\circ}\text{C}$

4:17 GW-5

2287 $\mu\text{s}/\text{cm}$
-15.5 ORP
0.28 DO ppm
7.00 pH
11.02 $^{\circ}\text{C}$

4:26 EB-1

2278 $\mu\text{s}/\text{cm}$
-11.0 ORP
0.77 DO ppm
6.93 pH
10.05 $^{\circ}\text{C}$

441

10/17/12

GW-7 1474 $\mu\text{s/cm}$
 22.1 ORP
 0.52 DO ppm
 6.50 pH
 11.95 $^{\circ}\text{C}$

450

GW-4 1593 $\mu\text{s/cm}$
 0.5 ORP
 0.21 DO ppm
 6.87 pH
 11.07 $^{\circ}\text{C}$

SO2 GW-6

2550 $\mu\text{s/cm}$
 -28.8 ORP
 1.76 DO ppm
 6.43 pH
 8.90 $^{\circ}\text{C}$

10/18/12 Thursday ³⁰
Clear

926 MW-3D: 1452 $\mu\text{s/cm}$
 -4.9 ORP
 0.83 DO ppm
 6.94 pH
 11.99 $^{\circ}\text{C}$

947 EB-2

3164 $\mu\text{s/cm}$
 -23.3 ORP
 0.67 DO ppm
 6.26 pH
 9.96 $^{\circ}\text{C}$

1016 ~~IP~~
MW-5S

3215 $\mu\text{s/cm}$
 36.2 ORP
 0.39 DO ppm
 4.70 pH
 11.49 $^{\circ}\text{C}$

10/18/12

1027 GW-3

888 µS/cm
17.2 ORP
2.72 DO ppm
6.61 pH
3.25 °C

1037 MW-5D

2075 µS/cm
-7.0 ORP
0.78 DO ppm
6.49 pH
10.02 °C

1045

FB

75 µS/cm
-24.7 ORP
4.00 DO ppm
7.19 pH
6.54 °C

10/18/12

1054 MW-6D

1983 µS/cm
-4.1 ORP
0.70 DO ppm
6.42 pH
10.59 °C

1101 MW-6S

1389 µS/cm
3.3 ORP
0.65 DO ppm
6.56 pH
10.99 °C

1109 MW-2D

1369 µS/cm
15.1 ORP
0.99 DO ppm
6.83 pH
13.62 °C

10/18/12

1128 MW-1D

1322 $\mu\text{S/cm}$
18.7 ORP
2.17 DO ppm
6.96 pH
12.68 $^{\circ}\text{C}$

1136 MW-1S

1326 $\mu\text{S/cm}$
20.3 ORP
1.52 DO ppm
6.96 pH
13.29 $^{\circ}\text{C}$

1145 MW-4S

1409 $\mu\text{S/cm}$
29.7 ORP
2.18 DO ppm
6.51 pH
13.36 $^{\circ}\text{C}$

10/18/12

1155 MW-4D

1404 $\mu\text{S/cm}$
29.2 ORP
2.89 DO ppm
6.68 pH
12.27 $^{\circ}\text{C}$

1217 DR-6

1613 $\mu\text{S/cm}$
26.8 ORP
4.95 DO ppm
7.02 pH
7.20 $^{\circ}\text{C}$

1229 DR-4

1399 $\mu\text{S/cm}$
25.0 ORP
4.32 DO ppm
7.42 pH
10.27 $^{\circ}\text{C}$

10/18/12

12:38 DR-2

450 $\mu\text{S}/\text{cm}$
18.2 ORP
4.25 DO ppm
7.42 pH
8.37 $^{\circ}\text{C}$

1246 DR-5

1466 $\mu\text{S}/\text{cm}$
27.0 ORP
4.48 DO ppm
7.47 pH
8.29 $^{\circ}\text{C}$

1256 DR-7

651 $\mu\text{S}/\text{cm}$
18.4 ORP
4.18 DO ppm
7.09 pH
9.32 $^{\circ}\text{C}$

10/18/12

109 DR-4 SW

641 $\mu\text{S}/\text{cm}$
26.8 ORP
4.14 DO ppm
7.43 pH
10.36 $^{\circ}\text{C}$

131 DR-G

516 $\mu\text{S}/\text{cm}$
19.9 ORP
4.51 DO ppm
7.86 pH
7.92 $^{\circ}\text{C}$

10/18/12

LR-G-BM 5 89
Wtr El ~~10~~
~~20~~
~~78~~

DR-G

V: 0, 0, 0, 0, 0.1, 0.2, 0.2, 0.2,
0.6, 0.4, 0.2, 0.6, 1.8, 2.0, 1.2, 1.0, 2.2,
1.4, 2.6, 0.8, 0.6, 1.2, 1.0, 2.4, 1.0, 0.4,
1.8, 0.6, 0.2, 0.4, 0.1, 0.0

D: 0, 0.1, 0.1, 0.2, 0.2, 0.2, 0.3, 0.4
0.4, 0.55, 0.55, 0.5, 0.6, 0.9, 0.85, 0.3, 0.6
0.7, 0.8, 0.4, 0.65, 0.5, 0.7, 0.5, 0.6, 0.5,
0.5, 0.3, 0.3, 0.2, 0.2, 0.0

10/18/12

DR-4-SW BM 1 92
Wtr El 4 92

DR-4-SW

V: 0.0, 0.2, 0.2, 0.6, 0.6, 0.4, 1.2, 1.4
1.0, 1.6, 0.2, 1.2, 0.4, 0.8, 1.2
1.2, 1.4, 0.4, 0.8, 0.6, 0.2, 0.8
0.2, 0.6, 1.2, 0.8, 0.6, 0.1, 0.2
0.6, 0.0

D: 0.0, 0.2, 0.5, 0.5, 0.6, 0.6, 0.7, 0.6
0.5, 0.3, 0.3, 0.3, 0.4, 0.7, 0.7
0.7, 0.7, 0.6, 0.3, 0.6, 0.6, 0.3
0.2, 0.4, 0.2, 0.2, 0.2, 0.2, 0.2
0.3, 0.0

10/18/12

DR1-BM 4²²
Wtr El 3²²

DR-1

0.0	0.2	0.8	0.0	1.8	2.0	0.6
0.6	0.3	0.5	1.2	0.6	0.3	0.2
0.1	0.2	0.0				

0.0	0.2	0.5	0.4	1.0	0.9	0.8
0.7	0.45	0.75	0.8	0.8	0.9	0.6
0.4	0.1	0.1	0.1	0.0		

10/18/12

Pond 1B = 8823⁷⁰

BM 1B/4 4²⁶

Pond 14	6 ⁸⁸
Pond 13	8 ²⁵

Dredging

BM 11/12/13 4⁴⁸

Pond 11	9 ⁶⁸
Pond 12	

Bm 9/10 5⁵⁴

Pond 9	10 ⁵⁴
Pond 10	8 ⁵⁴

BM 7/8 4⁸²

Pond 8	7 ⁵⁶
Pond 7	11 ⁰³

Bm 5/6 DR-21 4⁸²

DR-2	11 ²⁷
Pond 6	6 ¹⁰
Pond 5	8 ⁴³

10/18/12

CP-1-BM	1 ⁹⁶
Pond 4	13 ³⁵
Pond 3	15 ²⁴
BM 1/2	4 ¹⁵
Pond + 2	7 ⁰⁰
Pond 2 1	9 ⁶⁹

BM DR-7	6 ²⁶
wtr El	11 ¹⁰

V: 0.0 0.1 0.2 0.2 0.2 0.6 1.0
0.2 0.2 1.2 0.6 0.2 0.4 1.2
2.0 0.1 1.4 1.8 1.4 0.8 0.4
0.0 0.1 0.1 0.0 1.4 0.2 0.4
0.6 0.4 0.0 0.0 0.1 0.0 0.0
0.0

D: 0.0, 0.1 0.2 0.2 0.3 0.4 0.3
0.4 0.3 0.6 0.5 0.4 0.4 0.55
0.35 0.22 0.6 0.7 0.5 0.2 0.4
0.1 0.2 0.2 0.2 0.6 0.5 0.3
0.5 0.3 0.1 0.3 0.2 0.2 0.2
0.0

DR-2 10/18/12

V: 0.0, 0.1 0.2 0.1 0.2 0.2 0.2
0.6 0.8 0.8 0.6 0.8 0.8 0.4
0.8 0.4 0.2 0.2 0.2 0.2 0.1
0.0 0.0 0.0

D: 0.0, 0.25 0.6 0.3 0.8 0.85 1.1
0.9 1.0 1.05 0.9 1.0 1.2 1.1
1.15 1.0 0.8 0.9 0.4 0.6 0.5
0.2 0.1 0.0

10/19/12 Rico Friday Clear
60

1201 BAH -01

1336 mS/cm

125.0 ORP

0.00 DO ppm

7.88 pH

18.23 °C

128

Wednesday
10/31/12 1230 Clear
60

DR-1 Composite Sampling 4'
6 Compartment ~~each~~

C.	1	318	115/cm	-34.2 GRP	9.69
	2	317		-22.0	9.63
	3	317		-16.5	9.40
	4	317		-13.9	9.38
	5	318		-10.2	9.33
	6	317		-8.1	8.80
Composite		425		-7.6	6.13

129

DO ppm	8.92	PH	5.31 °C
	8.88		5.32
	8.88		5.36
	8.85		5.39
	8.84		5.44
	8.82		5.52
	8.30		7.57

130

10/31/12 Wednesday

6/can

60°

Clear

131

55°

115 DR-1A

Bm 7¹²

WTR Ele

999

V:	0.0	0.0	0.2	0.2	0.8	1.6
1.4	0.6	2.8	2.8	2.0	0.8	
1.0	1.0	0.2	0.0	0.2	0.6	
0.2	0.6	1.6	0.2	1.0	0.2	
0.1	0.0	0.0				

D:	0.0	0.1	0.6	0.5	0.6	0.5
0.3	0.4	0.5	0.3	0.3	2.4	
0.2	0.3	0.2	0.2	0.2	0.2	
0.4	0.4	0.2	0.3	0.4	0.45	
0.45	0.1	0.0				

10/31/12 Wednesday

1350

DR-2

DR-5 Composite Sampling

7 compartments 4' each

	Meter	ORP	D.O. ppm	pH	°C
1	449	-21.7	8.28	8.74	8.87
2	431	-18.9	8.39	8.73	8.68
3	424	-16.5	8.76	8.63	8.60
4	441	-15.0	8.67	8.55	8.67
5	462	-12.9	8.50	8.44	8.81
6	528	-11.6	8.17	8.23	9.21
7	689	-9.4	5.73	7.54	10.11
Composite b12		-9.2	5.28	7.71	10.66

132

10/31/12 Wednesday
1420Clear
55°DR-7 Composite Sample
8 compartments 6' each

	mg/cm	ORP	DO, ppm	pH	°C
1	656	5.6	8.60	7.01	9.86
2	632	6.7	8.96	7.02	9.86
3	600	7.3	8.93	7.08	9.45
4	578	7.9	8.93	7.11	9.37
5	575	8.8	8.65	7.11	9.42
6	573	9.4	8.98	7.07	9.44
7	577	9.9	9.00	7.00	9.59
8	603	11.2	8.20	6.90	9.38
Comp.	721	-5.5	5.63	7.73	11.79

10/31/12 Wednesday
Clear 50° 133

ZSS DR-2A

Bm 4 51
Wtr Ele. (East) 11 04
" " (West) 10 36

V:	0.0	0.05	0.0	0.0	0.05	island	0.0
	0.1	0.0	0.0	0.1	0.1	0.2	1.6
	1.2	0.8	0.2	2.0	2.8	3.0	3.2
	3.2	2.0	1.6	0.4	0.1	0.2	0.0
	0.0	0.0					

D:	0.05	0.1	0.0	0.0	0.05	island	0.1
	0.2	0.1	0.2	0.2	0.3	0.3	0.6
	0.7	0.5	0.3	0.5	0.5	0.6	0.6
	0.6	0.4	0.3	0.5	0.4	0.3	0.2
	0.2	0.0					

134

10/31/12 Wednesday
1515

Clear

55°F

DR - 3A

B.M. 4⁰⁷
Wtr Ele. 935

V:	0.0	0.0	0.0	1.0	0.4	0.4	0.8
0.4	0.6	1.0	1.4	1.0	2.2	0.6	
0.2	1.8	1.2	1.8	0.6	0.4	2.0	
2.0	2.4	0.0	0.0	0.0			

D:	0.0	0.05	0.05	0.2	0.1	0.5	0.4
0.45	0.5	0.55	0.6	0.4	0.4	0.4	
0.5	0.3	0.5	0.6	0.4	0.3	0.02	
0.2	0.2	0.1	0.1	0.0			

135

10/31/12 Wednesday
1555

Clear

55°F

DR - 4-SW Composite Sample

6 compartments 6' Each

	Mg/Lm	ORP	D.O. ppm	pH	°C
1	682	-19.9	9.01	8.23	10.29
2	682	-16.6	8.93	8.17	10.32
3	682	-13.0	8.90	8.13	10.29
4	681	-11.3	8.75	8.13	10.24
5	681	-9.9	8.77	8.14	10.21
6	682	-8.8	8.44	8.09	10.12
comp	678	6.8	5.09	8.01	10.49

Appendix I

North Flume OTT PLS Data with Flowrates

OTT PLS Data at North Flume, October 2012

Date, Time	Depth Reading	(ft)	Flowrate (cfs)	Flowrate (gpm)
10/1/2012 0:00		0.58	1.35	604.6
10/1/2012 1:00		0.58	1.35	604.6
10/1/2012 2:00		0.59	1.38	620.4
10/1/2012 3:00		0.58	1.35	604.6
10/1/2012 4:00		0.58	1.35	604.6
10/1/2012 5:00		0.58	1.35	604.6
10/1/2012 6:00		0.59	1.38	620.4
10/1/2012 7:00		0.58	1.35	604.6
10/1/2012 8:00		0.59	1.38	620.4
10/1/2012 9:00		0.59	1.38	620.4
10/1/2012 10:00		0.58	1.35	604.6
10/1/2012 11:00		0.58	1.35	604.6
10/1/2012 12:00		0.59	1.38	620.4
10/1/2012 13:00		0.58	1.35	604.6
10/1/2012 14:00		0.58	1.35	604.6
10/1/2012 15:00		0.59	1.38	620.4
10/1/2012 16:00		0.58	1.35	604.6
10/1/2012 17:00		0.58	1.35	604.6
10/1/2012 18:00		0.59	1.38	620.4
10/1/2012 19:00		0.59	1.38	620.4
10/1/2012 20:00		0.58	1.35	604.6
10/1/2012 21:00		0.59	1.38	620.4
10/1/2012 22:00		0.59	1.38	620.4
10/1/2012 23:00		0.59	1.38	620.4
10/2/2012 0:00		0.58	1.35	604.6
10/2/2012 1:00		0.58	1.35	604.6
10/2/2012 2:00		0.58	1.35	604.6
10/2/2012 3:00		0.58	1.35	604.6
10/2/2012 4:00		0.59	1.38	620.4
10/2/2012 5:00		0.58	1.35	604.6
10/2/2012 6:00		0.58	1.35	604.6
10/2/2012 7:00		0.58	1.35	604.6
10/2/2012 8:00		0.59	1.38	620.4
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10/2/2012 17:00		0.59	1.38	620.4

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10/2/2012 23:00	0.58	1.35	604.6
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10/20/2012 4:10	0.58	1.35	604.6
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10/20/2012 4:40	0.59	1.38	620.4
10/20/2012 4:50	0.58	1.35	604.6
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10/20/2012 5:10	0.59	1.38	620.4
10/20/2012 5:20	0.58	1.35	604.6
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10/20/2012 6:00	0.58	1.35	604.6
10/20/2012 6:10	0.58	1.35	604.6
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10/20/2012 6:30	0.59	1.38	620.4
10/20/2012 6:40	0.58	1.35	604.6
10/20/2012 6:50	0.58	1.35	604.6
10/20/2012 7:00	0.58	1.35	604.6

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10/20/2012 7:20	0.58	1.35	604.6
10/20/2012 7:30	0.58	1.35	604.6
10/20/2012 7:40	0.58	1.35	604.6
10/20/2012 7:50	0.58	1.35	604.6
10/20/2012 8:00	0.59	1.38	620.4
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10/20/2012 9:00	0.59	1.38	620.4
10/20/2012 9:10	0.58	1.35	604.6
10/20/2012 9:20	0.58	1.35	604.6
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10/20/2012 11:00	0.59	1.38	620.4
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10/20/2012 13:40	0.59	1.38	620.4
10/20/2012 14:00	0.58	1.35	604.6
10/20/2012 14:10	0.59	1.38	620.4
10/20/2012 14:10	0.59	1.38	620.4
10/20/2012 14:20	0.59	1.38	620.4
10/20/2012 14:30	0.59	1.38	620.4
10/20/2012 14:40	0.59	1.38	620.4
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10/20/2012 17:00	0.59	1.38	620.4
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10/20/2012 17:30	0.59	1.38	620.4
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10/20/2012 18:10	0.59	1.38	620.4
10/20/2012 18:20	0.59	1.38	620.4
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10/20/2012 20:50	0.59	1.38	620.4
10/20/2012 21:00	0.59	1.38	620.4
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10/20/2012 21:50	0.59	1.38	620.4
10/20/2012 22:00	0.59	1.38	620.4
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10/20/2012 22:20	0.59	1.38	620.4
10/20/2012 22:30	0.58	1.35	604.6
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10/20/2012 22:50	0.58	1.35	604.6
10/20/2012 23:00	0.58	1.35	604.6
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10/21/2012 16:00	0.58	1.35	604.6
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10/21/2012 21:40	0.59	1.38	620.4
10/21/2012 21:50	0.59	1.38	620.4
10/21/2012 22:00	0.59	1.38	620.4
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10/21/2012 23:00	0.58	1.35	604.6
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10/21/2012 23:30	0.59	1.38	620.4
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10/22/2012 3:00	0.58	1.35	604.6
10/22/2012 3:10	0.58	1.35	604.6
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10/22/2012 5:00	0.59	1.38	620.4
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10/22/2012 11:20	0.59	1.38	620.4
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10/22/2012 17:20	0.58	1.35	604.6
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10/22/2012 17:40	0.59	1.38	620.4
10/22/2012 17:50	0.58	1.35	604.6
10/22/2012 18:00	0.58	1.35	604.6
10/22/2012 18:10	0.59	1.38	620.4
10/22/2012 18:20	0.58	1.35	604.6
10/22/2012 18:30	0.59	1.38	620.4
10/22/2012 18:40	0.59	1.38	620.4
10/22/2012 18:50	0.58	1.35	604.6
10/22/2012 19:00	0.59	1.38	620.4
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10/22/2012 19:20	0.58	1.35	604.6
10/22/2012 19:30	0.59	1.38	620.4
10/22/2012 19:40	0.58	1.35	604.6
10/22/2012 19:50	0.58	1.35	604.6
10/22/2012 20:00	0.59	1.38	620.4
10/22/2012 20:10	0.59	1.38	620.4
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10/22/2012 20:40	0.59	1.38	620.4
10/22/2012 20:50	0.59	1.38	620.4
10/22/2012 21:00	0.59	1.38	620.4
10/22/2012 21:10	0.59	1.38	620.4
10/22/2012 21:20	0.58	1.35	604.6
10/22/2012 21:30	0.58	1.35	604.6
10/22/2012 21:40	0.59	1.38	620.4

10/22/2012 21:50	0.59	1.38	620.4
10/22/2012 22:00	0.59	1.38	620.4
10/22/2012 22:10	0.58	1.35	604.6
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10/22/2012 22:40	0.59	1.38	620.4
10/22/2012 22:50	0.59	1.38	620.4
10/22/2012 23:00	0.58	1.35	604.6
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10/22/2012 23:50	0.59	1.38	620.4
10/23/2012 0:00	0.59	1.38	620.4
10/23/2012 0:10	0.58	1.35	604.6
10/23/2012 0:20	0.59	1.38	620.4
10/23/2012 0:30	0.59	1.38	620.4
10/23/2012 0:40	0.59	1.38	620.4
10/23/2012 0:50	0.59	1.38	620.4
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10/23/2012 4:00	0.59	1.38	620.4
10/23/2012 4:10	0.59	1.38	620.4
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10/23/2012 5:20	0.59	1.38	620.4
10/23/2012 5:30	0.59	1.38	620.4

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10/23/2012 7:00	0.58	1.35	604.6
10/23/2012 7:10	0.59	1.38	620.4
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10/23/2012 8:00	0.59	1.38	620.4
10/23/2012 8:10	0.59	1.38	620.4
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10/23/2012 9:10	0.59	1.38	620.4
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10/23/2012 9:30	0.59	1.38	620.4
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10/23/2012 10:00	0.59	1.38	620.4
10/23/2012 10:10	0.59	1.38	620.4
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10/23/2012 11:00	0.59	1.38	620.4
10/23/2012 11:10	0.59	1.38	620.4
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10/23/2012 12:10	0.59	1.38	620.4
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10/23/2012 13:00	0.58	1.35	604.6
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10/23/2012 16:00	0.58	1.35	604.6
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10/23/2012 21:00	0.59	1.38	620.4
10/23/2012 21:10	0.59	1.38	620.4

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10/23/2012 21:50	0.58	1.35	604.6
10/23/2012 22:00	0.59	1.38	620.4
10/23/2012 22:10	0.59	1.38	620.4
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10/25/2012 3:00	0.58	1.35	604.6
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10/25/2012 3:30	0.58	1.35	604.6
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10/25/2012 4:00	0.58	1.35	604.6
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10/30/2012 10:30	0.58	1.35	604.6
10/30/2012 10:40	0.58	1.35	604.6
10/30/2012 10:50	0.58	1.35	604.6
10/30/2012 11:00	0.58	1.35	604.6
10/30/2012 11:10	0.58	1.35	604.6
10/30/2012 11:20	0.58	1.35	604.6
10/30/2012 11:30	0.58	1.35	604.6
10/30/2012 11:40	0.58	1.35	604.6
10/30/2012 11:50	0.58	1.35	604.6
10/30/2012 12:00	0.58	1.35	604.6
10/30/2012 12:10	0.58	1.35	604.6
10/30/2012 12:20	0.58	1.35	604.6
10/30/2012 12:30	0.58	1.35	604.6
10/30/2012 12:40	0.58	1.35	604.6
10/30/2012 12:50	0.58	1.35	604.6
10/30/2012 13:00	0.58	1.35	604.6
10/30/2012 13:10	0.58	1.35	604.6
10/30/2012 13:20	0.58	1.35	604.6
10/30/2012 13:30	0.58	1.35	604.6
10/30/2012 13:40	0.58	1.35	604.6
10/30/2012 13:50	0.58	1.35	604.6
10/30/2012 14:00	0.58	1.35	604.6
10/30/2012 14:10	0.58	1.35	604.6
10/30/2012 14:20	0.58	1.35	604.6
10/30/2012 14:30	0.58	1.35	604.6
10/30/2012 14:40	0.58	1.35	604.6
10/30/2012 14:50	0.58	1.35	604.6
10/30/2012 15:00	0.58	1.35	604.6
10/30/2012 15:10	0.58	1.35	604.6
10/30/2012 15:20	0.58	1.35	604.6
10/30/2012 15:30	0.58	1.35	604.6
10/30/2012 15:40	0.58	1.35	604.6
10/30/2012 15:50	0.58	1.35	604.6
10/30/2012 16:00	0.58	1.35	604.6
10/30/2012 16:10	0.58	1.35	604.6
10/30/2012 16:20	0.58	1.35	604.6
10/30/2012 16:30	0.58	1.35	604.6
10/30/2012 16:40	0.58	1.35	604.6
10/30/2012 16:50	0.58	1.35	604.6
10/30/2012 17:00	0.58	1.35	604.6
10/30/2012 17:10	0.58	1.35	604.6
10/30/2012 17:20	0.58	1.35	604.6
10/30/2012 17:30	0.58	1.35	604.6
10/30/2012 17:40	0.58	1.35	604.6

10/30/2012 17:50	0.58	1.35	604.6
10/30/2012 18:00	0.58	1.35	604.6
10/30/2012 18:10	0.58	1.35	604.6
10/30/2012 18:20	0.58	1.35	604.6
10/30/2012 18:30	0.58	1.35	604.6
10/30/2012 18:40	0.58	1.35	604.6
10/30/2012 18:50	0.58	1.35	604.6
10/30/2012 19:00	0.58	1.35	604.6
10/30/2012 19:10	0.58	1.35	604.6
10/30/2012 19:20	0.58	1.35	604.6
10/30/2012 19:30	0.58	1.35	604.6
10/30/2012 19:40	0.58	1.35	604.6
10/30/2012 19:50	0.58	1.35	604.6
10/30/2012 20:00	0.58	1.35	604.6
10/30/2012 20:10	0.58	1.35	604.6
10/30/2012 20:20	0.58	1.35	604.6
10/30/2012 20:30	0.58	1.35	604.6
10/30/2012 20:40	0.58	1.35	604.6
10/30/2012 20:50	0.58	1.35	604.6
10/30/2012 21:00	0.58	1.35	604.6
10/30/2012 21:10	0.58	1.35	604.6
10/30/2012 21:20	0.58	1.35	604.6
10/30/2012 21:30	0.58	1.35	604.6
10/30/2012 21:40	0.58	1.35	604.6
10/30/2012 21:50	0.58	1.35	604.6
10/30/2012 22:00	0.58	1.35	604.6
10/30/2012 22:10	0.58	1.35	604.6
10/30/2012 22:20	0.58	1.35	604.6
10/30/2012 22:30	0.58	1.35	604.6
10/30/2012 22:40	0.58	1.35	604.6
10/30/2012 22:50	0.58	1.35	604.6
10/30/2012 23:00	0.58	1.35	604.6
10/30/2012 23:10	0.58	1.35	604.6
10/30/2012 23:20	0.58	1.35	604.6
10/30/2012 23:30	0.58	1.35	604.6
10/30/2012 23:40	0.58	1.35	604.6
10/30/2012 23:50	0.58	1.35	604.6
10/31/2012 0:00	0.58	1.35	604.6
10/31/2012 0:10	0.58	1.35	604.6
10/31/2012 0:20	0.58	1.35	604.6
10/31/2012 0:30	0.58	1.35	604.6
10/31/2012 0:40	0.58	1.35	604.6
10/31/2012 0:50	0.58	1.35	604.6
10/31/2012 1:00	0.58	1.35	604.6
10/31/2012 1:10	0.58	1.35	604.6
10/31/2012 1:20	0.58	1.35	604.6
10/31/2012 1:30	0.58	1.35	604.6

10/31/2012 1:40	0.58	1.35	604.6
10/31/2012 1:50	0.58	1.35	604.6
10/31/2012 2:00	0.58	1.35	604.6
10/31/2012 2:10	0.58	1.35	604.6
10/31/2012 2:20	0.58	1.35	604.6
10/31/2012 2:30	0.58	1.35	604.6
10/31/2012 2:40	0.58	1.35	604.6
10/31/2012 2:50	0.58	1.35	604.6
10/31/2012 3:00	0.58	1.35	604.6
10/31/2012 3:10	0.58	1.35	604.6
10/31/2012 3:20	0.58	1.35	604.6
10/31/2012 3:30	0.58	1.35	604.6
10/31/2012 3:40	0.58	1.35	604.6
10/31/2012 3:50	0.58	1.35	604.6
10/31/2012 4:00	0.58	1.35	604.6
10/31/2012 4:10	0.58	1.35	604.6
10/31/2012 4:20	0.58	1.35	604.6
10/31/2012 4:30	0.58	1.35	604.6
10/31/2012 4:40	0.58	1.35	604.6
10/31/2012 4:50	0.58	1.35	604.6
10/31/2012 5:00	0.58	1.35	604.6
10/31/2012 5:10	0.58	1.35	604.6
10/31/2012 5:20	0.58	1.35	604.6
10/31/2012 5:30	0.58	1.35	604.6
10/31/2012 5:40	0.58	1.35	604.6
10/31/2012 5:50	0.58	1.35	604.6
10/31/2012 6:00	0.58	1.35	604.6
10/31/2012 6:10	0.58	1.35	604.6
10/31/2012 6:20	0.58	1.35	604.6
10/31/2012 6:30	0.58	1.35	604.6
10/31/2012 6:40	0.58	1.35	604.6
10/31/2012 6:50	0.58	1.35	604.6
10/31/2012 7:00	0.58	1.35	604.6
10/31/2012 7:10	0.58	1.35	604.6
10/31/2012 7:20	0.58	1.35	604.6
10/31/2012 7:30	0.58	1.35	604.6
10/31/2012 7:40	0.58	1.35	604.6
10/31/2012 7:50	0.58	1.35	604.6
10/31/2012 8:00	0.58	1.35	604.6
10/31/2012 8:10	0.58	1.35	604.6
10/31/2012 8:20	0.58	1.35	604.6
10/31/2012 8:30	0.58	1.35	604.6
10/31/2012 8:40	0.58	1.35	604.6
10/31/2012 8:50	0.58	1.35	604.6
10/31/2012 9:00	0.58	1.35	604.6
10/31/2012 9:10	0.58	1.35	604.6
10/31/2012 9:20	0.58	1.35	604.6

10/31/2012 9:30	0.58	1.35	604.6
10/31/2012 9:40	0.58	1.35	604.6
10/31/2012 9:50	0.58	1.35	604.6
10/31/2012 10:00	0.58	1.35	604.6
10/31/2012 10:10	0.58	1.35	604.6
10/31/2012 10:20	0.58	1.35	604.6
10/31/2012 10:30	0.58	1.35	604.6
10/31/2012 10:40	0.58	1.35	604.6
10/31/2012 10:50	0.58	1.35	604.6
10/31/2012 11:00	0.58	1.35	604.6
10/31/2012 11:10	0.58	1.35	604.6
10/31/2012 11:20	0.58	1.35	604.6
10/31/2012 11:30	0.58	1.35	604.6
10/31/2012 11:40	0.58	1.35	604.6
10/31/2012 11:50	0.58	1.35	604.6
10/31/2012 12:00	0.58	1.35	604.6
10/31/2012 12:10	0.58	1.35	604.6
10/31/2012 12:20	0.58	1.35	604.6
10/31/2012 12:30	0.58	1.35	604.6
10/31/2012 12:40	0.58	1.35	604.6
10/31/2012 12:50	0.58	1.35	604.6
10/31/2012 13:00	0.58	1.35	604.6
10/31/2012 13:10	0.58	1.35	604.6
10/31/2012 13:20	0.58	1.35	604.6
10/31/2012 13:30	0.58	1.35	604.6
10/31/2012 13:40	0.58	1.35	604.6
10/31/2012 13:50	0.58	1.35	604.6
10/31/2012 14:00	0.58	1.35	604.6
10/31/2012 14:10	0.58	1.35	604.6
10/31/2012 14:20	0.58	1.35	604.6
10/31/2012 14:30	0.58	1.35	604.6
10/31/2012 14:40	0.58	1.35	604.6
10/31/2012 14:50	0.58	1.35	604.6
10/31/2012 15:00	0.58	1.35	604.6
10/31/2012 15:10	0.58	1.35	604.6
10/31/2012 15:20	0.58	1.35	604.6
10/31/2012 15:30	0.58	1.35	604.6
10/31/2012 15:40	0.58	1.35	604.6
10/31/2012 15:50	0.58	1.35	604.6
10/31/2012 16:00	0.58	1.35	604.6
10/31/2012 16:10	0.58	1.35	604.6
10/31/2012 16:20	0.58	1.35	604.6
10/31/2012 16:30	0.58	1.35	604.6
10/31/2012 16:40	0.58	1.35	604.6
10/31/2012 16:50	0.58	1.35	604.6
10/31/2012 17:00	0.58	1.35	604.6
10/31/2012 17:10	0.58	1.35	604.6

10/31/2012 17:20	0.58	1.35	604.6
10/31/2012 17:30	0.58	1.35	604.6
10/31/2012 17:40	0.58	1.35	604.6
10/31/2012 17:50	0.58	1.35	604.6
10/31/2012 18:00	0.58	1.35	604.6
10/31/2012 18:10	0.58	1.35	604.6
10/31/2012 18:20	0.58	1.35	604.6
10/31/2012 18:30	0.58	1.35	604.6
10/31/2012 18:40	0.58	1.35	604.6
10/31/2012 18:50	0.58	1.35	604.6
10/31/2012 19:00	0.58	1.35	604.6
10/31/2012 19:10	0.58	1.35	604.6
10/31/2012 19:20	0.58	1.35	604.6
10/31/2012 19:30	0.58	1.35	604.6
10/31/2012 19:40	0.58	1.35	604.6
10/31/2012 19:50	0.58	1.35	604.6
10/31/2012 20:00	0.58	1.35	604.6
10/31/2012 20:10	0.58	1.35	604.6
10/31/2012 20:20	0.58	1.35	604.6
10/31/2012 20:30	0.58	1.35	604.6
10/31/2012 20:40	0.58	1.35	604.6
10/31/2012 20:50	0.58	1.35	604.6
10/31/2012 21:00	0.58	1.35	604.6
10/31/2012 21:10	0.58	1.35	604.6
10/31/2012 21:20	0.58	1.35	604.6
10/31/2012 21:30	0.58	1.35	604.6
10/31/2012 21:40	0.58	1.35	604.6
10/31/2012 21:50	0.58	1.35	604.6
10/31/2012 22:00	0.58	1.35	604.6
10/31/2012 22:10	0.58	1.35	604.6
10/31/2012 22:20	0.58	1.35	604.6
10/31/2012 22:30	0.58	1.35	604.6
10/31/2012 22:40	0.58	1.35	604.6
10/31/2012 22:50	0.58	1.35	604.6
10/31/2012 23:00	0.58	1.35	604.6
10/31/2012 23:10	0.58	1.35	604.6
10/31/2012 23:20	0.58	1.35	604.6
10/31/2012 23:30	0.58	1.35	604.6
10/31/2012 23:40	0.58	1.35	604.6
10/31/2012 23:50	0.58	1.35	604.6

Appendix J

South Flume Orpheus Mini Data with Flowrates

OTT Opheus Mini Data at South Flume, October 2012

Date	Time	Depth from top of flume to water (ft)	Depth of Flume Total (ft)	Depth of Flow (ft)	Flowrate (cfs)	Flowrate (gpm)
10/1/2012	12:00:00 AM	2.4	2.5	0.10	0.09	42.5
10/1/2012	1:00:00 AM	2.4	2.5	0.10	0.09	42.5
10/1/2012	2:00:00 AM	2.4	2.5	0.10	0.09	42.5
10/1/2012	3:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/1/2012	4:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/1/2012	5:00:00 AM	2.38	2.5	0.12	0.12	55.9
10/1/2012	6:00:00 AM	2.44	2.5	0.06	0.04	19.6
10/1/2012	7:00:00 AM	2.43	2.5	0.07	0.06	24.8
10/1/2012	8:00:00 AM	2.43	2.5	0.07	0.06	24.8
10/1/2012	9:00:00 AM	2.43	2.5	0.07	0.06	24.8
10/1/2012	10:00:00 AM	2.33	2.5	0.17	0.21	94.7
10/1/2012	11:00:00 AM	2.33	2.5	0.17	0.21	94.7
10/1/2012	12:00:00 PM	2.33	2.5	0.17	0.21	94.7
10/1/2012	1:00:00 PM	2.32	2.5	0.18	0.23	103.2
10/1/2012	2:00:00 PM	2.3	2.5	0.20	0.27	121.0
10/1/2012	3:00:00 PM	2.27	2.5	0.23	0.33	149.5
10/1/2012	4:00:00 PM	2.24	2.5	0.26	0.40	179.9
10/1/2012	5:00:00 PM	2.21	2.5	0.29	0.47	212.2
10/1/2012	6:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/1/2012	7:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/1/2012	8:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/1/2012	9:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/1/2012	10:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/1/2012	11:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/2/2012	12:00:00 AM	2.2	2.5	0.30	0.50	223.3
10/2/2012	1:00:00 AM	2.2	2.5	0.30	0.50	223.3
10/2/2012	2:00:00 AM	2.21	2.5	0.29	0.47	212.2
10/2/2012	3:00:00 AM	2.23	2.5	0.27	0.42	190.5
10/2/2012	4:00:00 AM	2.23	2.5	0.27	0.42	190.5
10/2/2012	5:00:00 AM	2.24	2.5	0.26	0.40	179.9
10/2/2012	6:00:00 AM	2.27	2.5	0.23	0.33	149.5
10/2/2012	7:00:00 AM	2.27	2.5	0.23	0.33	149.5
10/2/2012	8:00:00 AM	2.26	2.5	0.24	0.36	159.4
10/2/2012	9:00:00 AM	2.24	2.5	0.26	0.40	179.9
10/2/2012	10:00:00 AM	2.24	2.5	0.26	0.40	179.9
10/2/2012	11:00:00 AM	2.22	2.5	0.28	0.45	201.2
10/2/2012	12:00:00 PM	2.21	2.5	0.29	0.47	212.2
10/2/2012	1:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/2/2012	2:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/2/2012	3:00:00 PM	2.16	2.5	0.34	0.60	269.8
10/2/2012	4:00:00 PM	2.15	2.5	0.35	0.63	281.9
10/2/2012	5:00:00 PM	2.13	2.5	0.37	0.68	306.6
10/2/2012	6:00:00 PM	2.12	2.5	0.38	0.71	319.2

10/2/2012	7:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/2/2012	8:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/2/2012	9:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/2/2012	10:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/2/2012	11:00:00 PM	2.09	2.5	0.41	0.80	358.0
10/3/2012	12:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/3/2012	1:00:00 AM	2.07	2.5	0.43	0.86	384.7
10/3/2012	2:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/3/2012	3:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/3/2012	4:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/3/2012	5:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/3/2012	6:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/3/2012	7:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/3/2012	8:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/3/2012	9:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/3/2012	10:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/3/2012	11:00:00 AM	1.93	2.5	0.57	1.31	588.9
10/3/2012	12:00:00 PM	1.94	2.5	0.56	1.28	573.4
10/3/2012	1:00:00 PM	1.96	2.5	0.54	1.21	542.7
10/3/2012	2:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/3/2012	3:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/3/2012	4:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/3/2012	5:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/3/2012	6:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/3/2012	7:00:00 PM	2.08	2.5	0.42	0.83	371.3
10/3/2012	8:00:00 PM	2.09	2.5	0.41	0.80	358.0
10/3/2012	9:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/3/2012	10:00:00 PM	2.13	2.5	0.37	0.68	306.6
10/3/2012	11:00:00 PM	2.15	2.5	0.35	0.63	281.9
10/4/2012	12:00:00 AM	2.17	2.5	0.33	0.57	257.9
10/4/2012	1:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/4/2012	2:00:00 AM	2.33	2.5	0.17	0.21	94.7
10/4/2012	3:00:00 AM	2.35	2.5	0.15	0.17	78.4
10/4/2012	4:00:00 AM	2.33	2.5	0.17	0.21	94.7
10/4/2012	5:00:00 AM	2.41	2.5	0.09	0.08	36.2
10/4/2012	6:00:00 AM	2.35	2.5	0.15	0.17	78.4
10/4/2012	7:00:00 AM	2.32	2.5	0.18	0.23	103.2
10/4/2012	8:00:00 AM	2.32	2.5	0.18	0.23	103.2
10/4/2012	9:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/4/2012	10:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/4/2012	11:00:00 AM	2.17	2.5	0.33	0.57	257.9
10/4/2012	12:00:00 PM	2.2	2.5	0.30	0.50	223.3
10/4/2012	1:00:00 PM	2.22	2.5	0.28	0.45	201.2
10/4/2012	2:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/4/2012	3:00:00 PM	2.22	2.5	0.28	0.45	201.2
10/4/2012	4:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/4/2012	5:00:00 PM	2.15	2.5	0.35	0.63	281.9

10/4/2012	6:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/4/2012	7:00:00 PM	2.09	2.5	0.41	0.80	358.0
10/4/2012	8:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/4/2012	9:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/4/2012	10:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/4/2012	11:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/5/2012	12:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/5/2012	1:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/5/2012	2:00:00 AM	2.31	2.5	0.19	0.25	112.0
10/5/2012	3:00:00 AM	2.36	2.5	0.14	0.16	70.6
10/5/2012	4:00:00 AM	2.34	2.5	0.16	0.19	86.4
10/5/2012	5:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/5/2012	6:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/5/2012	7:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/5/2012	8:00:00 AM	1.94	2.5	0.56	1.28	573.4
10/5/2012	9:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/5/2012	10:00:00 AM	1.48	2.5	1.02	3.16	1418.5
10/5/2012	11:00:00 AM	1.58	2.5	0.92	2.70	1213.8
10/5/2012	12:00:00 PM	1.62	2.5	0.88	2.53	1134.9
10/5/2012	1:00:00 PM	1.65	2.5	0.85	2.40	1077.0
10/5/2012	2:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/5/2012	3:00:00 PM	1.68	2.5	0.82	2.27	1020.1
10/5/2012	4:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/5/2012	5:00:00 PM	1.66	2.5	0.84	2.36	1057.9
10/5/2012	6:00:00 PM	1.65	2.5	0.85	2.40	1077.0
10/5/2012	7:00:00 PM	1.64	2.5	0.86	2.44	1096.2
10/5/2012	8:00:00 PM	1.64	2.5	0.86	2.44	1096.2
10/5/2012	9:00:00 PM	1.64	2.5	0.86	2.44	1096.2
10/5/2012	10:00:00 PM	1.65	2.5	0.85	2.40	1077.0
10/5/2012	11:00:00 PM	1.62	2.5	0.88	2.53	1134.9
10/6/2012	12:00:00 AM	1.6	2.5	0.90	2.62	1174.1
10/6/2012	1:00:00 AM	1.54	2.5	0.96	2.88	1294.4
10/6/2012	2:00:00 AM	1.48	2.5	1.02	3.16	1418.5
10/6/2012	3:00:00 AM	1.46	2.5	1.04	3.25	1460.7
10/6/2012	4:00:00 AM	1.43	2.5	1.07	3.40	1524.8
10/6/2012	5:00:00 AM	1.58	2.5	0.92	2.70	1213.8
10/6/2012	6:00:00 AM	1.5	2.5	1.00	3.07	1376.7
10/6/2012	7:00:00 AM	1.46	2.5	1.04	3.25	1460.7
10/6/2012	8:00:00 AM	1.37	2.5	1.13	3.69	1655.8
10/6/2012	9:00:00 AM	1.36	2.5	1.14	3.74	1678.0
10/6/2012	10:00:00 AM	1.35	2.5	1.15	3.79	1700.3
10/6/2012	11:00:00 AM	1.35	2.5	1.15	3.79	1700.3
10/6/2012	12:00:00 PM	1.38	2.5	1.12	3.64	1633.8
10/6/2012	1:00:00 PM	1.5	2.5	1.00	3.07	1376.7
10/6/2012	2:00:00 PM	1.57	2.5	0.93	2.75	1233.7
10/6/2012	3:00:00 PM	1.61	2.5	0.89	2.57	1154.5
10/6/2012	4:00:00 PM	1.64	2.5	0.86	2.44	1096.2

10/6/2012	5:00:00 PM	1.65	2.5	0.85	2.40	1077.0
10/6/2012	6:00:00 PM	1.66	2.5	0.84	2.36	1057.9
10/6/2012	7:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/6/2012	8:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/6/2012	9:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/6/2012	10:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/6/2012	11:00:00 PM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	12:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	1:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	2:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	3:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	4:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	5:00:00 AM	1.68	2.5	0.82	2.27	1020.1
10/7/2012	6:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	7:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	8:00:00 AM	1.67	2.5	0.83	2.31	1038.9
10/7/2012	9:00:00 AM	1.87	2.5	0.63	1.53	685.0
10/7/2012	10:00:00 AM	1.93	2.5	0.57	1.31	588.9
10/7/2012	11:00:00 AM	1.97	2.5	0.53	1.18	527.6
10/7/2012	12:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/7/2012	1:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/7/2012	2:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/7/2012	3:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/7/2012	4:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/7/2012	5:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/7/2012	6:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/7/2012	7:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/7/2012	8:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/7/2012	9:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/7/2012	10:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/7/2012	11:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/8/2012	12:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/8/2012	1:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/8/2012	2:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/8/2012	3:00:00 AM	2.16	2.5	0.34	0.60	269.8
10/8/2012	4:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/8/2012	5:00:00 AM	2.07	2.5	0.43	0.86	384.7
10/8/2012	6:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/8/2012	7:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/8/2012	8:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/8/2012	9:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/8/2012	10:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/8/2012	11:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/8/2012	12:00:00 PM	1.8	2.5	0.70	1.79	803.2
10/8/2012	1:00:00 PM	1.87	2.5	0.63	1.53	685.0
10/8/2012	2:00:00 PM	1.9	2.5	0.60	1.42	636.4
10/8/2012	3:00:00 PM	1.92	2.5	0.58	1.35	604.6

10/8/2012	4:00:00 PM	1.96	2.5	0.54	1.21	542.7
10/8/2012	5:00:00 PM	1.97	2.5	0.53	1.18	527.6
10/8/2012	6:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/8/2012	7:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/8/2012	8:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/8/2012	9:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/8/2012	10:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/8/2012	11:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/9/2012	12:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/9/2012	1:00:00 AM	2.06	2.5	0.44	0.89	398.3
10/9/2012	2:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/9/2012	3:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/9/2012	4:00:00 AM	2.09	2.5	0.41	0.80	358.0
10/9/2012	5:00:00 AM	2.09	2.5	0.41	0.80	358.0
10/9/2012	6:00:00 AM	2.12	2.5	0.38	0.71	319.2
10/9/2012	7:00:00 AM	2.12	2.5	0.38	0.71	319.2
10/9/2012	8:00:00 AM	2.12	2.5	0.38	0.71	319.2
10/9/2012	9:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/9/2012	10:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/9/2012	11:00:00 AM	2.16	2.5	0.34	0.60	269.8
10/9/2012	12:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/9/2012	1:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/9/2012	2:00:00 PM	2.2	2.5	0.30	0.50	223.3
10/9/2012	3:00:00 PM	2.21	2.5	0.29	0.47	212.2
10/9/2012	4:00:00 PM	2.22	2.5	0.28	0.45	201.2
10/9/2012	5:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/9/2012	6:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/9/2012	7:00:00 PM	2.24	2.5	0.26	0.40	179.9
10/9/2012	8:00:00 PM	2.25	2.5	0.25	0.38	169.6
10/9/2012	9:00:00 PM	2.25	2.5	0.25	0.38	169.6
10/9/2012	10:00:00 PM	2.26	2.5	0.24	0.36	159.4
10/9/2012	11:00:00 PM	2.26	2.5	0.24	0.36	159.4
10/10/2012	12:00:00 AM	2.27	2.5	0.23	0.33	149.5
10/10/2012	1:00:00 AM	2.29	2.5	0.21	0.29	130.3
10/10/2012	2:00:00 AM	2.25	2.5	0.25	0.38	169.6
10/10/2012	3:00:00 AM	2.24	2.5	0.26	0.40	179.9
10/10/2012	4:00:00 AM	2.22	2.5	0.28	0.45	201.2
10/10/2012	5:00:00 AM	2.21	2.5	0.29	0.47	212.2
10/10/2012	6:00:00 AM	2.21	2.5	0.29	0.47	212.2
10/10/2012	7:00:00 AM	2.2	2.5	0.30	0.50	223.3
10/10/2012	8:00:00 AM	2.2	2.5	0.30	0.50	223.3
10/10/2012	9:00:00 AM	2.18	2.5	0.32	0.55	246.2
10/10/2012	10:00:00 AM	2.22	2.5	0.28	0.45	201.2
10/10/2012	11:00:00 AM	2.25	2.5	0.25	0.38	169.6
10/10/2012	12:00:00 PM	2.27	2.5	0.23	0.33	149.5
10/10/2012	1:00:00 PM	2.28	2.5	0.22	0.31	139.8
10/10/2012	2:00:00 PM	2.29	2.5	0.21	0.29	130.3

10/10/2012	3:00:00 PM	2.3	2.5	0.20	0.27	121.0
10/10/2012	4:00:00 PM	2.3	2.5	0.20	0.27	121.0
10/10/2012	5:00:00 PM	2.31	2.5	0.19	0.25	112.0
10/10/2012	6:00:00 PM	2.31	2.5	0.19	0.25	112.0
10/10/2012	7:00:00 PM	2.32	2.5	0.18	0.23	103.2
10/10/2012	8:00:00 PM	2.32	2.5	0.18	0.23	103.2
10/10/2012	9:00:00 PM	2.32	2.5	0.18	0.23	103.2
10/10/2012	10:00:00 PM	2.32	2.5	0.18	0.23	103.2
10/10/2012	11:00:00 PM	2.31	2.5	0.19	0.25	112.0
10/11/2012	12:00:00 AM	2.31	2.5	0.19	0.25	112.0
10/11/2012	1:00:00 AM	2.31	2.5	0.19	0.25	112.0
10/11/2012	2:00:00 AM	2.3	2.5	0.20	0.27	121.0
10/11/2012	3:00:00 AM	2.31	2.5	0.19	0.25	112.0
10/11/2012	4:00:00 AM	2.3	2.5	0.20	0.27	121.0
10/11/2012	5:00:00 AM	2.3	2.5	0.20	0.27	121.0
10/11/2012	6:00:00 AM	2.29	2.5	0.21	0.29	130.3
10/11/2012	7:00:00 AM	2.28	2.5	0.22	0.31	139.8
10/11/2012	8:00:00 AM	2.26	2.5	0.24	0.36	159.4
10/11/2012	9:00:00 AM	2.23	2.5	0.27	0.42	190.5
10/11/2012	10:00:00 AM	2.18	2.5	0.32	0.55	246.2
10/11/2012	11:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/11/2012	12:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/11/2012	1:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/11/2012	2:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/11/2012	3:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/11/2012	4:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/11/2012	5:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/11/2012	6:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/11/2012	7:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/11/2012	8:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/11/2012	9:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/11/2012	10:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/11/2012	11:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/12/2012	12:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/12/2012	1:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/12/2012	2:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/12/2012	3:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/12/2012	4:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/12/2012	5:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/12/2012	6:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/12/2012	7:00:00 AM	1.89	2.5	0.61	1.45	652.4
10/12/2012	8:00:00 AM	1.82	2.5	0.68	1.71	768.8
10/12/2012	9:00:00 AM	1.79	2.5	0.71	1.83	820.6
10/12/2012	10:00:00 AM	1.65	2.5	0.85	2.40	1077.0
10/12/2012	11:00:00 AM	1.79	2.5	0.71	1.83	820.6
10/12/2012	12:00:00 PM	1.82	2.5	0.68	1.71	768.8
10/12/2012	1:00:00 PM	1.85	2.5	0.65	1.60	718.1

10/12/2012	2:00:00 PM	1.88	2.5	0.62	1.49	668.7
10/12/2012	3:00:00 PM	1.9	2.5	0.60	1.42	636.4
10/12/2012	4:00:00 PM	1.91	2.5	0.59	1.38	620.4
10/12/2012	5:00:00 PM	1.92	2.5	0.58	1.35	604.6
10/12/2012	6:00:00 PM	1.94	2.5	0.56	1.28	573.4
10/12/2012	7:00:00 PM	1.95	2.5	0.55	1.24	558.0
10/12/2012	8:00:00 PM	1.95	2.5	0.55	1.24	558.0
10/12/2012	9:00:00 PM	1.96	2.5	0.54	1.21	542.7
10/12/2012	10:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/12/2012	11:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/13/2012	12:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/13/2012	1:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/13/2012	2:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/13/2012	3:00:00 AM	1.89	2.5	0.61	1.45	652.4
10/13/2012	4:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/13/2012	5:00:00 AM	2.19	2.5	0.31	0.52	234.7
10/13/2012	6:00:00 AM	2.23	2.5	0.27	0.42	190.5
10/13/2012	7:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/13/2012	8:00:00 AM	2.07	2.5	0.43	0.86	384.7
10/13/2012	9:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/13/2012	10:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/13/2012	11:00:00 AM	2.06	2.5	0.44	0.89	398.3
10/13/2012	12:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/13/2012	1:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/13/2012	2:00:00 PM	1.56	2.5	0.94	2.79	1253.8
10/13/2012	3:00:00 PM	1.86	2.5	0.64	1.56	701.5
10/13/2012	4:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/13/2012	5:00:00 PM	2.09	2.5	0.41	0.80	358.0
10/13/2012	6:00:00 PM	2.14	2.5	0.36	0.66	294.1
10/13/2012	7:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/13/2012	8:00:00 PM	2.2	2.5	0.30	0.50	223.3
10/13/2012	9:00:00 PM	2.21	2.5	0.29	0.47	212.2
10/13/2012	10:00:00 PM	2.33	2.5	0.17	0.21	94.7
10/13/2012	11:00:00 PM	2.4	2.5	0.10	0.09	42.5
10/14/2012	12:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/14/2012	1:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/14/2012	2:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/14/2012	3:00:00 AM	2.41	2.5	0.09	0.08	36.2
10/14/2012	4:00:00 AM	2.41	2.5	0.09	0.08	36.2
10/14/2012	5:00:00 AM	2.35	2.5	0.15	0.17	78.4
10/14/2012	6:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/14/2012	7:00:00 AM	2.31	2.5	0.19	0.25	112.0
10/14/2012	8:00:00 AM	2.24	2.5	0.26	0.40	179.9
10/14/2012	9:00:00 AM	2.21	2.5	0.29	0.47	212.2
10/14/2012	10:00:00 AM	2.19	2.5	0.31	0.52	234.7
10/14/2012	11:00:00 AM	2.17	2.5	0.33	0.57	257.9
10/14/2012	12:00:00 PM	2.16	2.5	0.34	0.60	269.8

10/14/2012	1:00:00 PM	2.16	2.5	0.34	0.60	269.8
10/14/2012	2:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/14/2012	3:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/14/2012	4:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/14/2012	5:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/14/2012	6:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/14/2012	7:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/14/2012	8:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/14/2012	9:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/14/2012	10:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/14/2012	11:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/15/2012	12:00:00 AM	2.18	2.5	0.32	0.55	246.2
10/15/2012	1:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/15/2012	2:00:00 AM	2.24	2.5	0.26	0.40	179.9
10/15/2012	3:00:00 AM	2.34	2.5	0.16	0.19	86.4
10/15/2012	4:00:00 AM	2.26	2.5	0.24	0.36	159.4
10/15/2012	5:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/15/2012	6:00:00 AM	2.21	2.5	0.29	0.47	212.2
10/15/2012	7:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/15/2012	8:00:00 AM	2.06	2.5	0.44	0.89	398.3
10/15/2012	9:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/15/2012	10:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/15/2012	11:00:00 AM	1.93	2.5	0.57	1.31	588.9
10/15/2012	12:00:00 PM	1.45	2.5	1.05	3.30	1482.0
10/15/2012	1:00:00 PM	1.73	2.5	0.77	2.07	927.6
10/15/2012	2:00:00 PM	1.85	2.5	0.65	1.60	718.1
10/15/2012	3:00:00 PM	1.92	2.5	0.58	1.35	604.6
10/15/2012	4:00:00 PM	1.97	2.5	0.53	1.18	527.6
10/15/2012	5:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/15/2012	6:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/15/2012	7:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/15/2012	8:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/15/2012	9:00:00 PM	2.08	2.5	0.42	0.83	371.3
10/15/2012	10:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/15/2012	11:00:00 PM	2.18	2.5	0.32	0.55	246.2
10/16/2012	12:00:00 AM	2.18	2.5	0.32	0.55	246.2
10/16/2012	1:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/16/2012	2:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/16/2012	3:00:00 AM	2.06	2.5	0.44	0.89	398.3
10/16/2012	4:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/16/2012	5:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/16/2012	6:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/16/2012	7:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/16/2012	8:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/16/2012	9:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/16/2012	10:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/16/2012	11:00:00 AM	2.14	2.5	0.36	0.66	294.1

10/16/2012	12:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/16/2012	1:00:00 PM	2.2	2.5	0.30	0.50	223.3
10/16/2012	2:00:00 PM	2.22	2.5	0.28	0.45	201.2
10/16/2012	3:00:00 PM	2.24	2.5	0.26	0.40	179.9
10/16/2012	4:00:00 PM	2.25	2.5	0.25	0.38	169.6
10/16/2012	5:00:00 PM	2.25	2.5	0.25	0.38	169.6
10/16/2012	6:00:00 PM	2.26	2.5	0.24	0.36	159.4
10/16/2012	7:00:00 PM	2.27	2.5	0.23	0.33	149.5
10/16/2012	8:00:00 PM	2.27	2.5	0.23	0.33	149.5
10/16/2012	9:00:00 PM	2.28	2.5	0.22	0.31	139.8
10/16/2012	10:00:00 PM	2.28	2.5	0.22	0.31	139.8
10/16/2012	11:00:00 PM	2.29	2.5	0.21	0.29	130.3
10/17/2012	12:00:00 AM	2.29	2.5	0.21	0.29	130.3
10/17/2012	1:00:00 AM	2.3	2.5	0.20	0.27	121.0
10/17/2012	2:00:00 AM	2.3	2.5	0.20	0.27	121.0
10/17/2012	3:00:00 AM	2.31	2.5	0.19	0.25	112.0
10/17/2012	4:00:00 AM	2.32	2.5	0.18	0.23	103.2
10/17/2012	5:00:00 AM	2.32	2.5	0.18	0.23	103.2
10/17/2012	6:00:00 AM	2.33	2.5	0.17	0.21	94.7
10/17/2012	7:00:00 AM	2.33	2.5	0.17	0.21	94.7
10/17/2012	8:00:00 AM	2.32	2.5	0.18	0.23	103.2
10/17/2012	9:00:00 AM	2.36	2.5	0.14	0.16	70.6
10/17/2012	10:00:00 AM	2.28	2.5	0.22	0.31	139.8
10/17/2012	11:00:00 AM	2.25	2.5	0.25	0.38	169.6
10/17/2012	12:00:00 PM	2.24	2.5	0.26	0.40	179.9
10/17/2012	1:00:00 PM	2.21	2.5	0.29	0.47	212.2
10/17/2012	2:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/17/2012	3:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/17/2012	4:00:00 PM	2.08	2.5	0.42	0.83	371.3
10/17/2012	5:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/17/2012	6:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/17/2012	7:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/17/2012	8:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/17/2012	9:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/17/2012	10:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/17/2012	11:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/18/2012	12:00:00 AM	2.07	2.5	0.43	0.86	384.7
10/18/2012	1:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/18/2012	2:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/18/2012	3:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/18/2012	4:00:00 AM	2.23	2.5	0.27	0.42	190.5
10/18/2012	5:00:00 AM	2.22	2.5	0.28	0.45	201.2
10/18/2012	6:00:00 AM	2.18	2.5	0.32	0.55	246.2
10/18/2012	7:00:00 AM	2.16	2.5	0.34	0.60	269.8
10/18/2012	8:00:00 AM	2.16	2.5	0.34	0.60	269.8
10/18/2012	9:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/18/2012	10:00:00 AM	1.99	2.5	0.51	1.11	497.8

10/18/2012	11:00:00 AM	2.07	2.5	0.43	0.86	384.7
10/18/2012	12:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/18/2012	1:00:00 PM	2.15	2.5	0.35	0.63	281.9
10/18/2012	2:00:00 PM	2.17	2.5	0.33	0.57	257.9
10/18/2012	3:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/18/2012	4:00:00 PM	2.19	2.5	0.31	0.52	234.7
10/18/2012	5:00:00 PM	2.21	2.5	0.29	0.47	212.2
10/18/2012	6:00:00 PM	2.22	2.5	0.28	0.45	201.2
10/18/2012	7:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/18/2012	8:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/18/2012	9:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/18/2012	10:00:00 PM	2.23	2.5	0.27	0.42	190.5
10/18/2012	11:00:00 PM	2.24	2.5	0.26	0.40	179.9
10/19/2012	12:00:00 AM	2.29	2.5	0.21	0.29	130.3
10/19/2012	1:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/19/2012	2:00:00 AM	2.37	2.5	0.13	0.14	63.1
10/19/2012	3:00:00 AM	2.4	2.5	0.10	0.09	42.5
10/19/2012	4:00:00 AM	2.34	2.5	0.16	0.19	86.4
10/19/2012	5:00:00 AM	2.3	2.5	0.20	0.27	121.0
10/19/2012	6:00:00 AM	2.27	2.5	0.23	0.33	149.5
10/19/2012	7:00:00 AM	2.25	2.5	0.25	0.38	169.6
10/19/2012	8:00:00 AM	2.25	2.5	0.25	0.38	169.6
10/19/2012	9:00:00 AM	2.27	2.5	0.23	0.33	149.5
10/19/2012	10:00:00 AM	2.26	2.5	0.24	0.36	159.4
10/19/2012	11:00:00 AM	2.26	2.5	0.24	0.36	159.4
10/19/2012	12:00:00 PM	2.26	2.5	0.24	0.36	159.4
10/19/2012	1:00:00 PM	2.27	2.5	0.23	0.33	149.5
10/19/2012	2:00:00 PM	2.26	2.5	0.24	0.36	159.4
10/19/2012	3:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/19/2012	4:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/19/2012	5:00:00 PM	2.12	2.5	0.38	0.71	319.2
10/19/2012	6:00:00 PM	2.13	2.5	0.37	0.68	306.6
10/19/2012	7:00:00 PM	2.14	2.5	0.36	0.66	294.1
10/19/2012	8:00:00 PM	2.13	2.5	0.37	0.68	306.6
10/19/2012	9:00:00 PM	2.12	2.5	0.38	0.71	319.2
10/19/2012	10:00:00 PM	2.12	2.5	0.38	0.71	319.2
10/19/2012	11:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/20/2012	12:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/20/2012	1:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/20/2012	2:00:00 AM	2.19	2.5	0.31	0.52	234.7
10/20/2012	3:00:00 AM	2.19	2.5	0.31	0.52	234.7
10/20/2012	4:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/20/2012	5:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/20/2012	6:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/20/2012	7:00:00 AM	1.97	2.5	0.53	1.18	527.6
10/20/2012	8:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/20/2012	9:00:00 AM	1.94	2.5	0.56	1.28	573.4

10/20/2012	10:00:00 AM	1.55	2.5	0.95	2.84	1274.0
10/20/2012	11:00:00 AM	1.78	2.5	0.72	1.87	838.1
10/20/2012	12:00:00 PM	1.88	2.5	0.62	1.49	668.7
10/20/2012	1:00:00 PM	1.93	2.5	0.57	1.31	588.9
10/20/2012	2:00:00 PM	1.96	2.5	0.54	1.21	542.7
10/20/2012	3:00:00 PM	1.97	2.5	0.53	1.18	527.6
10/20/2012	4:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/20/2012	5:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/20/2012	6:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/20/2012	7:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/20/2012	8:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/20/2012	9:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/20/2012	10:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/20/2012	11:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/21/2012	12:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/21/2012	1:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/21/2012	2:00:00 AM	1.97	2.5	0.53	1.18	527.6
10/21/2012	3:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/21/2012	4:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/21/2012	5:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/21/2012	6:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/21/2012	7:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/21/2012	8:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/21/2012	9:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/21/2012	10:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/21/2012	11:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/21/2012	12:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/21/2012	1:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/21/2012	2:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/21/2012	3:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/21/2012	4:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/21/2012	5:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/21/2012	6:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/21/2012	7:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/21/2012	8:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/21/2012	9:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/21/2012	10:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/21/2012	11:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/22/2012	12:00:00 AM	1.97	2.5	0.53	1.18	527.6
10/22/2012	1:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/22/2012	2:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/22/2012	3:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/22/2012	4:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/22/2012	5:00:00 AM	2.16	2.5	0.34	0.60	269.8
10/22/2012	6:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/22/2012	7:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/22/2012	8:00:00 AM	1.98	2.5	0.52	1.14	512.6

10/22/2012	9:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/22/2012	10:00:00 AM	1.77	2.5	0.73	1.91	855.8
10/22/2012	11:00:00 AM	1.88	2.5	0.62	1.49	668.7
10/22/2012	12:00:00 PM	1.94	2.5	0.56	1.28	573.4
10/22/2012	1:00:00 PM	1.96	2.5	0.54	1.21	542.7
10/22/2012	2:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/22/2012	3:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/22/2012	4:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/22/2012	5:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/22/2012	6:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/22/2012	7:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/22/2012	8:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/22/2012	9:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/22/2012	10:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/22/2012	11:00:00 PM	2.08	2.5	0.42	0.83	371.3
10/23/2012	12:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/23/2012	1:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/23/2012	2:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/23/2012	3:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/23/2012	4:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/23/2012	5:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/23/2012	6:00:00 AM	2.06	2.5	0.44	0.89	398.3
10/23/2012	7:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/23/2012	8:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/23/2012	9:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/23/2012	10:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/23/2012	11:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/23/2012	12:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/23/2012	1:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/23/2012	2:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/23/2012	3:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/23/2012	4:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/23/2012	5:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/23/2012	6:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/23/2012	7:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/23/2012	8:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/23/2012	9:00:00 PM	2.09	2.5	0.41	0.80	358.0
10/23/2012	10:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/23/2012	11:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/24/2012	12:00:00 AM	2.12	2.5	0.38	0.71	319.2
10/24/2012	1:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/24/2012	2:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/24/2012	3:00:00 AM	2.26	2.5	0.24	0.36	159.4
10/24/2012	4:00:00 AM	2.22	2.5	0.28	0.45	201.2
10/24/2012	5:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/24/2012	6:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/24/2012	7:00:00 AM	2.12	2.5	0.38	0.71	319.2

10/24/2012	8:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/24/2012	9:00:00 AM	2.1	2.5	0.40	0.77	344.9
10/24/2012	10:00:00 AM	2.08	2.5	0.42	0.83	371.3
10/24/2012	11:00:00 AM	2.07	2.5	0.43	0.86	384.7
10/24/2012	12:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/24/2012	1:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/24/2012	2:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/24/2012	3:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/24/2012	4:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/24/2012	5:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/24/2012	6:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/24/2012	7:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/24/2012	8:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/24/2012	9:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/24/2012	10:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/24/2012	11:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/25/2012	12:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/25/2012	1:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/25/2012	2:00:00 AM	1.97	2.5	0.53	1.18	527.6
10/25/2012	3:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/25/2012	4:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/25/2012	5:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/25/2012	6:00:00 AM	1.98	2.5	0.52	1.14	512.6
10/25/2012	7:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/25/2012	8:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/25/2012	9:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/25/2012	10:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/25/2012	11:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/25/2012	12:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/25/2012	1:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/25/2012	2:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/25/2012	3:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/25/2012	4:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/25/2012	5:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/25/2012	6:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/25/2012	7:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/25/2012	8:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/25/2012	9:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/25/2012	10:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/25/2012	11:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/26/2012	12:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	1:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	2:00:00 AM	1.99	2.5	0.51	1.11	497.8
10/26/2012	3:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	4:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	5:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	6:00:00 AM	2.0	2.5	0.50	1.08	483.2

10/26/2012	7:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	8:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	9:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/26/2012	10:00:00 AM	1.95	2.5	0.55	1.24	558.0
10/26/2012	11:00:00 AM	1.96	2.5	0.54	1.21	542.7
10/26/2012	12:00:00 PM	1.98	2.5	0.52	1.14	512.6
10/26/2012	1:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/26/2012	2:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/26/2012	3:00:00 PM	2.0	2.5	0.50	1.08	483.2
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10/26/2012	6:00:00 PM	2.01	2.5	0.49	1.04	468.6
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10/26/2012	10:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/26/2012	11:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/27/2012	12:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/27/2012	1:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/27/2012	2:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/27/2012	3:00:00 AM	2.05	2.5	0.45	0.92	412.1
10/27/2012	4:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/27/2012	5:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/27/2012	6:00:00 AM	2.04	2.5	0.46	0.95	426.0
10/27/2012	7:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/27/2012	8:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/27/2012	9:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/27/2012	10:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/27/2012	11:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/27/2012	12:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	1:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	2:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	3:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	4:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	5:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	6:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	7:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	8:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/27/2012	9:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	10:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/27/2012	11:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/28/2012	12:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/28/2012	1:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/28/2012	2:00:00 AM	2.0	2.5	0.50	1.08	483.2
10/28/2012	3:00:00 AM	1.95	2.5	0.55	1.24	558.0
10/28/2012	4:00:00 AM	1.92	2.5	0.58	1.35	604.6
10/28/2012	5:00:00 AM	1.9	2.5	0.60	1.42	636.4

10/28/2012	6:00:00 AM	1.9	2.5	0.60	1.42	636.4
10/28/2012	7:00:00 AM	1.88	2.5	0.62	1.49	668.7
10/28/2012	8:00:00 AM	1.86	2.5	0.64	1.56	701.5
10/28/2012	9:00:00 AM	1.85	2.5	0.65	1.60	718.1
10/28/2012	10:00:00 AM	1.85	2.5	0.65	1.60	718.1
10/28/2012	11:00:00 AM	1.84	2.5	0.66	1.64	734.9
10/28/2012	12:00:00 PM	1.84	2.5	0.66	1.64	734.9
10/28/2012	1:00:00 PM	1.8	2.5	0.70	1.79	803.2
10/28/2012	2:00:00 PM	1.9	2.5	0.60	1.42	636.4
10/28/2012	3:00:00 PM	1.95	2.5	0.55	1.24	558.0
10/28/2012	4:00:00 PM	1.97	2.5	0.53	1.18	527.6
10/28/2012	5:00:00 PM	1.99	2.5	0.51	1.11	497.8
10/28/2012	6:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/28/2012	7:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/28/2012	8:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/28/2012	9:00:00 PM	2.0	2.5	0.50	1.08	483.2
10/28/2012	10:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/28/2012	11:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/29/2012	12:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/29/2012	1:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/29/2012	2:00:00 AM	2.01	2.5	0.49	1.04	468.6
10/29/2012	3:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/29/2012	4:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/29/2012	5:00:00 AM	2.03	2.5	0.47	0.98	440.0
10/29/2012	6:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/29/2012	7:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/29/2012	8:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/29/2012	9:00:00 AM	2.01	2.5	0.49	1.04	468.6
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10/29/2012	12:00:00 PM	2.01	2.5	0.49	1.04	468.6
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10/29/2012	5:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/29/2012	6:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/29/2012	7:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/29/2012	8:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/29/2012	9:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/29/2012	10:00:00 PM	2.08	2.5	0.42	0.83	371.3
10/29/2012	11:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/30/2012	12:00:00 AM	2.11	2.5	0.39	0.74	332.0
10/30/2012	1:00:00 AM	2.12	2.5	0.38	0.71	319.2
10/30/2012	2:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/30/2012	3:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/30/2012	4:00:00 AM	2.14	2.5	0.36	0.66	294.1

10/30/2012	5:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/30/2012	6:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/30/2012	7:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/30/2012	8:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/30/2012	9:00:00 AM	2.15	2.5	0.35	0.63	281.9
10/30/2012	10:00:00 AM	2.14	2.5	0.36	0.66	294.1
10/30/2012	11:00:00 AM	2.13	2.5	0.37	0.68	306.6
10/30/2012	12:00:00 PM	2.12	2.5	0.38	0.71	319.2
10/30/2012	1:00:00 PM	2.11	2.5	0.39	0.74	332.0
10/30/2012	2:00:00 PM	2.1	2.5	0.40	0.77	344.9
10/30/2012	3:00:00 PM	2.09	2.5	0.41	0.80	358.0
10/30/2012	4:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/30/2012	5:00:00 PM	2.07	2.5	0.43	0.86	384.7
10/30/2012	6:00:00 PM	2.06	2.5	0.44	0.89	398.3
10/30/2012	7:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/30/2012	8:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/30/2012	9:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/30/2012	10:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/30/2012	11:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/31/2012	12:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	1:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	2:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	3:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	4:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	5:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	6:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	7:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	8:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	9:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	10:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	11:00:00 AM	2.02	2.5	0.48	1.01	454.3
10/31/2012	12:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/31/2012	1:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/31/2012	2:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/31/2012	3:00:00 PM	2.01	2.5	0.49	1.04	468.6
10/31/2012	4:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/31/2012	5:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/31/2012	6:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/31/2012	7:00:00 PM	2.02	2.5	0.48	1.01	454.3
10/31/2012	8:00:00 PM	2.03	2.5	0.47	0.98	440.0
10/31/2012	9:00:00 PM	2.04	2.5	0.46	0.95	426.0
10/31/2012	10:00:00 PM	2.05	2.5	0.45	0.92	412.1
10/31/2012	11:00:00 PM	2.05	2.5	0.45	0.92	412.1

Appendix K

Technical Standard Operating Procedure – Collection of Cross-Channel Surface Water Samples

TECHNICAL STANDARD OPERATING PROCEDURE No.
Collection of Cross-Channel Surface Water Samples

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TECHNICAL STANDARD OPERATING PROCEDURE No.

Collection of Cross-Channel Surface Water Samples

1.0 PURPOSE

This standard operating procedure (SOP) describes the requirements and process for collecting surface water samples from multiple locations across the channel of a wadeable stream. Collecting multiple samples along a transect perpendicular to the stream flow will provide information on the homogeneity of water chemistry across the channel (if samples are analyzed independently) or will provide a representative sample of stream water chemistry (if individual samples are composited before analysis). This procedure can be used wherever it is possible to wade completely across the channel. Where the water is too deep for wading, these procedures may be modified to be used from a stable boat. Samples collected using this method may be analyzed on-site or transported to a laboratory. Proper preservation techniques may vary depending on the target analytes. Site-specific deviations from this SOP must be approved by the AECL Project Manager or the Client Project Manager prior to initiation of the sampling activity.

2.0 SCOPE

Surface water sampling is applicable to most study sites with surface drainages directly on the site or that are located hydraulically downgradient from such drainages.

3.0 REQUIREMENTS

Factors that may affect the ability to collect cross-channel samples include channel width, water depth, water velocity, channel bed stability and composition of the substrata. For successful completion of this procedure, a site must be safely accessible by sampling personnel access to the entire width of the stream channel must be possible. Ultra clean methods shall be followed for sampling activities.

3.1 Health and Safety

Stream substrata, or bed material, can be highly variable, even within a small stream section, and may pose a risk to those working in the stream. Large rocks with significant algal growth can be slick and those pose a fall risk. Rocks and sand can shift when weight is applied to them. Sharp rocks, sticks and artificial debris (broken bottles, metals, barbed wire) can puncture boots and skin. Before wading into a new area of the stream, examine the area visually, if possible, and use one foot to gently probe and stream bottom for suitable footing. If necessary, use a wading staff for stability.

PPE: Waders, nitrile or similar gloves.

Operational or safety issues associated with this procedure shall be reported to the on-site supervisor, AECL Project Manager, SH&E Coordinator, or their designees for resolution. Employees and contractors are required to stop work when they believe work conditions are unsafe.

4.0 REFERENCES

USGS. 1999. *National Field Manual for the Collection of Water-Quality Data, Chapter A4. Collection of Water Samples.*

USEPA. *Water: Monitoring and Assessment.* Chapter 5 Water Quality Conditions. (website)

USEPA. 1999. *Rapid Bioassessment Protocols for use in Wadeable Streams and Rivers.* EPA 841-B-99-002.

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USEPA. 1996. *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. EPA Method 1669. Office of Water, Engineering and Analysis Division, Washington, DC.

USGS. 1985. *Study and Interpretation of the Chemical Characteristics of Natural Water*. USGS Water Supply Paper 2254.

5.0 DEFINITIONS

Environmental Sample – Low concentration sample typically collected offsite and not requiring DOT hazardous waste labeling as a high hazard sample.

Clean Hands – All operations involving contact with the sample bottle and transfer of the sample from the sample collection device to the sample bottle are handled by the individual designated as “clean hands.”

Dirty Hands – All operations involving preparation of the sampler (except the sample container itself), operation of any machinery and all other activities that do not involve direct contact with the sample, shall be performed by the individual designated as “dirty hands.”

6.0 RESPONSIBILITIES

Project Manager

The Project Manager (PM) is responsible for the selection of the appropriate methodology, technique and field procedure for conducting the sampling.

Field Project Leader

The Field Project Leader (FPL) may be an AECI employee or contractor who is responsible for overseeing the sampling activities. The FPL is also responsible for making on-site decisions as to slight shifts in the cross-channel sampling location in order to ensure a safe working environment and that representative samples will be collected. The FPL provides oversight for all work performed and verification that the activity satisfies the requirements of this SOP and the Project Plan.

7.0 EQUIPMENT

1. Sampling bottles (certified clean and pre-treated with preservatives, if necessary)
2. Large (~2 L to 5 gallon) mixing bottles (e.g., a clean cubitainer)
3. Decontamination equipment and supplies
4. Nitrile gloves
5. Shoulder-length gloves
6. Peristaltic sump, clean tubing and 0.45 µm inline filters, or
7. 60 cc syringes and 0.45 µm syringe filters
8. Labels
9. Sharpies® or other indelible markers
10. 100-foot tape measure or rope with accurately-marked intervals
11. ≥ 3 foot rebar or wooden stakes
12. Orange plastic flagging
13. Hammer

8.0 PROCEDURE

8.1 General Procedures for Collection of Cross-Channel Water Samples

TECHNICAL STANDARD OPERATING PROCEDURE No.

Collection of Cross-Channel Surface Water Samples

-
- Determine whether the multiple samples collected across the channel will be composited into a single sample, or analyzed independently. If the latter, then sufficient volume must be collected at each site for all analyses.
 - Acquire the necessary number and type of sample containers for all samples. A “sample” (composite or multiple individual samples) will consist of five (5) bottles, including two 250-mL acidified (to ≤ 2 pH with nitric acid) high density polyethylene (HDPE) bottles (one non-filtered for total metals and hardness analysis, and one filtered (0.45 µm) for dissolved metals analysis), one 250-mL HPDE bottle with NaOH (for cyanide analysis), one 250-mL HDPE bottle (unpreserved) for salinity, and one 500-mL HDPE bottle (unpreserved) for the remaining inorganic analyses.
 - Upon arrival at the site, one member of the sampling shall be designated as “dirty hands” and a second member shall be designated as “clean hands.”
 - The cross-channel samples shall follow the general USGS procedure of equal-width-increment (EWI) sampling. Each stream section to be sampled will be of approximately equal width.
 - If samples are to be collected at multiple transects, begin work at the furthest downstream location.
 - Select the sampling transect location. One person shall stand at the edge of one bank of the stream holding the tape or rope and a second person shall carry the end of the tape or rope across the stream. As much as possible, minimize disturbance of the stream bottom and limit the area of travel to a narrow corridor. Samples shall always be collected upstream of the disturbed area.
 - With the tape or rope as taut as possible, secure the tape/rope to stakes on each bank.
 - Determine the number of sampling compartments (sections). See Figure 1 of this SOP and follow this general guidance:
 - Small stream (≤ 25 ft in width): 4-6 compartments
 - Intermediate stream ($> 25 - 50$ ft in width): 6-12 compartments
 - Large stream (> 50 ft in width): ≥ 12 compartments
 - Stream features should also be used in determining the number of compartments. It may be appropriate to place different features (pools, runs, ripples, eddies) into separate compartments. A seemingly homogenous reach (e.g., a consistent run) will probably require fewer compartments.
 - Using the hammer, drive a stake into the stream bed marking the center of the compartment. Tie an orange flag at the top of each stake to make them more visible.

8.2 Collection of Independent Samples in each Compartment

- One of the unpreserved sample bottles may be used to collect water from the stream at each staked location, or a separate container may be used. As 1500 mL are needed for all analyses, a 2 L collection bottle would be adequate for collecting the individual compartment samples (new bottle for each compartment).
- Don clean gloves. Nitrile gloves are acceptable, however, for deeper water wear clean, shoulder-length gloves.
- Approach the location from the downstream side. Once in position, wait approximately 30 seconds (or longer if needed) for any disturbed fine sediment to be carried downstream.

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- At the midpoint of the compartment, where the stake is located, rinse the bottle three times with stream water. Just upstream of the stake, place the sampling bottle into the water, gently lowering it through the water column. The mouth of the bottle should be facing generally upstream, but the bottle should be angled upward at ~20-45° to allow air to escape as the bottle fills. Do not touch the bottom of the stream, as that may disturb sediment. Raise the bottle slowly back up through the water column. The bottle should be full when it is lifted from the water.
 - Securely replace the bottle cap and hand the filled bottle to another staff member (or place it on a rock or other location where it will not be carried downstream). Each bottle should be appropriately marked with the correct compartment number.
 - Go to the next compartment, again approaching from the downstream side, and repeat the collection process.
 - Divide the sample into the appropriate preserved and unpreserved bottles (see Section 8.4 of this SOP).

8.3 Collection of a Composite Sample

- Before collecting samples for analysis, determine in which compartment a sample bottle will fill the fastest when lowered and raised through the water column (e.g., 1 minute, 30 seconds, etc.). This will be the Transit time. Use this same Transit time at all compartments, even if a bottle is not completely filled when brought back to the surface.
- As 1500 mL are needed for all analyses, a 1 L collection bottle should be adequate for collecting the individual compartment samples, which will be mixed as a composite sample before being subdivided for analyses. Use a new bottle for each compartment.
- Don clean gloves. Nitrile gloves are acceptable, however, for deeper water wear clean, shoulder-length gloves.
- Approach the location from the downstream side. Once in position, wait approximately 30 seconds (or longer if needed) for any disturbed fine sediment to be carried downstream.
- At the midpoint of the compartment, where the stake is located, rinse the bottle three times with stream water. Just upstream of the stake, gently lower and raise the sampling bottle into the water within the pre-determined Transit time. The mouth of the bottle should be facing generally upstream, but the bottle should be angled upward at ~20-45° to allow air to escape as the bottle fills. Do not touch the bottom of the stream, as that may disturb sediment. The bottle may not be completely full when it is lifted from the water.
- Securely replace the bottle cap and hand the filled bottle to another staff member (or place it on a rock or other location where it will not be carried downstream). Each bottle should be appropriately marked with the correct compartment number.
- Go to the next compartment, again approaching from the downstream side, and repeat the collection process.

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- When all compartment samples have been collected, mix each by vigorously inverting them no less than three times, and immediately emptying them into the large mixing bottle. Make sure the mixing bottle is large enough to contain the water collected.
 - Cap the mixing bottle and homogenize the composite sample by vigorously and repeatedly swirling and inverting the bottle for no less than one minute.
 - Divide the sample into the appropriate preserved and unpreserved bottles (see Section 8.4 of this SOP). Some sample may remain in the mixing bottle.

8.4 Dividing a Sample to Individual Analyte Bottles

- Fill all containers, except the one for dissolved metals, with the raw water sample, either the individual compartment samples, or the composite.
- Do not overfill the bottles that already contain preservative.
- For the dissolved metals sample, filter 250 mL of the raw water sample using a 1) peristaltic pump equipped with new, disposable tubing and a new, 0.45 µm filter, or 2) new, 60 cc syringe and 0.45 µm filter syringes.
- If using a pump, tubing and filter, place the intake tube into the raw sample and the outlet tube into the 250 mL sample bottle with preservative. Activate the pump and filter enough water to fill the sample bottle, without overfilling.
- If using a syringe and syringe filters, draw approximately 60 cc of the raw water sample into the syringe before the filter is attached. Attach the filter and depress the plunger while holding the syringe filter outlet over the preserved sample bottle. It may be necessary to stop and replace the filter if the raw water contains a high level of solids.
- Make sure all sample bottles are securely capped and labeled.

9.0 DOCUMENTATION/VERIFICATION

A record of field activities, including the number and type of samples collected, shall be recorded on field data sheets or in a field log. The log shall be reviewed by the FPL to verify the accuracy of the data.

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Figure 1. Example of the general placement of the cross-channel sampling compartments for the equal-width-increment (EWI) sampling procedure.

